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ORIGINAL LECTURES.

CLINICAL LECTURE ON SYPHILITIC SEQUELÆ (TER- TIARY SYPHILIS) RESULTING FROM SYPHILIS ACQUIRED IN UTERO.

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TERTIARY SYMPTOMS OF INTRA-UTERINE SYPHILIS.

GENTLEMEN.—Here is a little, but not very young, patient, whom I first saw a few moments ago. He is 18 years of age. The grandmother, who is with the lad, intimates that the mother of the boy was of rather obscure origin, and claims that the difficulty in the case originated on her side. It was a year and nine months from the date of the marriage that this child was born ; she further states that the mother and the father both had an eruption within that time. It is evident from the general appearance of this boy that he is suffering at the present time from the late lesions of syphilis. These lesions are in line with those which we were speaking about last week, changes in the bone-substance in various localities as a result of damage to lymphatic spaces and channels in various localities, and which, after periods varying from two or three to fifty or more years, become obstructed or obliterated, causing localized accumulation of lymphatic fluid and lymph-cells, constituting what is usually termed *gummy material*. This gummy material, as I have previously explained to you, has been found to form the only constant abnormal constituent of every lesion of late or tertiary syphilis,—whether the lesion be known as a *gummy tumor*, or a *tubercular syphilitide*, or a *syphilitic node*, or any other sequel of syphilis. I have also shown you that this gummy material, so called, possesses neither corrosive nor contagious properties, but that the damage caused by its presence is chiefly, if not wholly, mechanical, causing destruction by pressure, obstruction of blood-vessels, etc. In our last lecture I called your attention especially to two forms of syphilitic sequelæ which were strikingly in proof of this statement,—viz., the tubercular lesions

of syphilis, which often pursue their course without ulceration, and yet leave cicatricial depressions showing loss of tissue by absorption, from the mechanical influence of the gummy infiltration in the skin ; and, secondly, the losses of bone-structure which, on the skull especially, cause depressions without either inflammation or suppuration. These syphilitic sequelæ were traced back, in every case presented, to an initial lesion of syphilis, and various characteristic lesions of the active or contagious stage of syphilis were shown to have intervened between the initial lesion and the sequelæ. The cases shown were all adults. In the present instance the patient is a child. Both its parents were subjects of an eruption, which, although eighteen years ago, the grandmother remembers distinctly to have been after the marriage, and before the birth of the child. She states that it was thought to be a bad disease, and claims that it was communicated to her son by the mother of this boy.

The grandmother states, further, that the patient was not much under her observation during its early childhood, but she observed its little neck, big head, and later, at five or six years, she saw an eruption which covered the entire body, leaving depressions or scars after its disappearance.

I think there can be no question, gentlemen, that this trouble was acquired in utero, and that the initial lesion was in utero ; that is to say, that the initial period of the disease was in utero. Of course there was no localized abrasion ; the poison was introduced into the circulation directly ; there was no period of incubation. The description of the general appearance of the child as given by the grandmother suggests a syphilitic diathesis. The eruption she saw after the fifth year was not characteristic of the eruptions of the early stage of syphilis, but of the tubercular eruptions which in the adult appear at any period after the second—usually between the second and seventh—year.

As we strip this child,—for, although eighteen years old, in body and mind he is still a child,—we see numerous scars resulting from the tuberculous eruptions he has suffered from. But the most prominent evidence of the effects of the disease as we see it now is in the bones of the head and face, and on the cranium in par-

ticular. Passing my hands over the head, I find that there are evidences of that sort of bone-trouble alluded to last week under the subject of dry caries of Virchow,—a form of lesion of bony structure that is more characteristic of syphilis than any other lesion, and which is evidently the result of pressure of the so-called gummosous material localized between the external and internal tables of the skull. In some cases this process goes on to ulceration, while in many others there is no ulceration from the first to the last. Consequently, as I before remarked, the term caries, as applied to this trouble, is a misnomer. The change is not the result of caries, as we cannot have caries without suppuration, without that peculiar form of destruction which comes on from an ulcerative process, and there is no ulcerative process here. We have present here several such points where there have been no open sores, while there is also, as you see, a large open bony ulcer on the top of the head. Here on the front part of the hairy portion of the scalp is a marked circular depression. It is said that the boy had a fall and struck there. The depression appears as though it might have been so caused, and yet it is the same sort of depression which occurs in similar cases without any inflammatory process whatever,—a swelling or a bulging which may disappear, and sometimes leaves a depression of bone, without any inflammation having been apparent during its entire course. Yet conditions may be present which shall lead to suppuration in some cases. Let, for instance, the gummosous tumor go on to a considerable size and attract attention, while the patient is in good condition there will be no special trouble from it; but if he be in depressed condition a suppurative process may commence which will go on (often producing great havoc in the bony tissues) until arrested by a change in the patient's circumstances or by treatment. So that depressing influences, anything to deteriorate the condition of the patient, may change a so-called simple dry caries into an open ulcerative condition, such as you see here. I have often seen these nodes of considerable size develop without pain of any consequence, without evidence of inflammatory trouble, and then disappear more quickly than they arose, under the influence of the mixed treatment,—the

mercurial and the iodide of potassium,—within perhaps a few weeks, whereas if they had been let alone an inflammatory process might have been set up, when this material would have taken on suppuration, and there would have been true loss of tissue by ulcerative process.

We notice here that the bones of the nose have been carried away; there has been loss of bony material of the forehead, and general disfigurement of the head and body. This boy, eighteen years of age, is not larger than most boys of five. The effect of the disease has been to stunt, retard the growth in every respect. Exactly how it does so is pretty difficult to say. But where we find a positive lesion, a localized point of trouble, in these cases, it is in line with what we know occurs late in specific disease in the adult, and the same course of treatment would be indicated. The chief interest in the case is the history of the acquirement of the disease in utero, and its illustration of the fact that when so acquired it develops exactly the same as when occurring in the adult.

What I wish particularly to demonstrate and illustrate by this case is that the disease pursues the same course in every living organism as far as that organism is capable of developing it,—in the infant, in the youth, in the adult,—apparent differences being readily accounted for by the differences in the maturity and stability of the tissues; that while in this case we have a history of so-called hereditary syphilis, the conditions in which it has resulted do not differ in any respect from syphilitic sequelæ following acquired syphilis in the adult; that the lesions are not the effect of a vitiated *hereditary diathesis*, but, as far as a single case can go, it gives support to the view I have long held, that syphilis in the infant, in the embryo, or the ovum, is the result of direct contact of its germinal cells with the contagium of syphilis through the blood of the mother. The claim often made that syphilis is or may be communicated to the embryo through the influence of the male parent directly is disproved by the fact, demonstrated by the experiments of Mireur and others, now accepted by all recent authorities, that the semen does not contain the contagious property of syphilis. Syphilis must, then, first be communicated to the mother before it can reach her unborn child. According to the views previously set before you demonstrating the

material nature of syphilitic infection, the first requirement to that end is an organism free from syphilis; second, contact with the syphilitic contagium or principle. It has been practically demonstrated that the secretion of the sequelæ of syphilis, the so-called "gummy material," is free from a contagious property. The contagium of syphilis is comparatively short-lived; the contagious property in the blood has been so amply proved by the statistics of Fournier that it must be accepted as a rule that it does not last more than two or three years.* The power of this contagium, then, to transmit disease through generations cannot be admitted, any more than the power of the contagium of smallpox. This position is the legitimate and necessary sequence of the material views of the nature and behavior of syphilis which I have held and taught for the past fifteen years. Mr. Jonathan Hutchinson, in his lectures on the "Pedigree of Disease" in 1881 (published in London, 1884), says, page 90, "A child, then, I assert, *inherits syphilis in precisely the same sense and in precisely the same manner as it may inherit smallpox*. It inherits, not the *diathesis*, but the *disease*." "The reason why," he says, "the inheritance of smallpox is very rare, whilst that of syphilis is unfortunately common, is simply that the period during which the virus is extant in the blood is very different in the two cases." He claims that the clinical facts generally known in regard to the syphilis of infants afford proof that the *diathesis* of syphilis is as incapable of transmission as that of any of the exanthemata, and he concludes that "*no modified transmission is possible*; that the child gets either nothing at all, or the germs of the disease, and that in the latter case they will, subject to the laws of idiosyncrasy, develop equally in all cases." Mr. Hutchinson, generally conceded to be the greatest English authority on syphilis, thus distinctly supports the germ theory of syphilis, and carries it to the legitimate conclusion that the disease is confined in every instance to the individual organism infected, and hence that it is incapable of being acquired or communicated through hereditary transmission; in other words, that *there is no such disease as hereditary syphilis*, any more than there is an heredi-

tary smallpox, and that in every case of syphilis the disease is *acquired* through contact with a disease-germ of syphilis in an organism previously free from that disease, whether it occurs in the ovum, the embryo, the foetus, the infant, or in the adult. This is exactly the position which is taken by me in the chapter on "Syphilis of Infants and Hereditary Syphilis," in my book on Genito-Urinary Diseases and Syphilis, published by Birmingham & Co., New York, 1883, page 204 *et seq.*, and more fully discussed in an article prepared for the second edition of that work and published, from advance sheets, in the first number of *The Esculapian* (edited by Ed. J. Birmingham, A.M., M.D.), New York, January, 1884. If, then, as has been shown, the semen does not contain the contagium of syphilis, the male parent cannot transmit it directly to his offspring. The mother must first acquire the disease; and it is only through the disease-germs of syphilis circulating in her organism that the product of conception can be infected before birth. The disease thus acquired, —in accordance with the views of Hutchinson, previously quoted, and in accordance with the views I have advanced, —"subject to the laws of idiosyncrasy, develops equally in all cases."

It is undoubtedly the fact that much disease in foetal and in infantile life results from pre-existing disease the legitimate sequel of syphilis in the organism of the mother; but that any syphilitic disease proved to be such by its power to transmit syphilis has been communicated to healthy persons, by infants conceived after the active or contagious stage of syphilis in the parents has passed, there is no well-authenticated evidence to prove. And this stage, as has already been stated, has been shown, by ample testimony, not to extend over a period of three or four years.

The pathology and treatment of the late lesions or sequelæ of syphilis will be made the subject of consideration in a subsequent lecture.

G. P. PUTNAM'S SONS will shortly publish, by arrangement with the Vienna publisher, a translation, prepared by Dr. Barney Sachs, with the authorization of the author, of Dr. Meynert's Treatise on Psychiatry. The first part of the work, devoted to the anatomy and physiology of the brain, the publishers hope to have ready by the beginning of the new year. The work will be fully illustrated.

*See Otis on Syphilis and the Genito-Urinary Diseases, Birmingham & Co., New York, 1883, p. 167 *et seq.*

ORIGINAL COMMUNICATIONS.

TEN CASES OF EXTRA-GENITAL CHANCRE.

WITH REMARKS.

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THE possible occurrence of chancre at other points than about the genitals should always be kept in mind. The statistics of Mauriac and other French observers show that of 3145 chancres 184 were extra-genital, and in private quite as much as in public practice we must be prepared to meet innocent-looking sores, pimples, or abrasions arising no one knows how, and developing into well-marked chancres followed by the general symptoms of syphilis.

It is with the view of drawing attention to the symptoms displayed by certain among the more commonly occurring extra-genital chancres that I have brought together the following cases. They have come under my notice in a practice which is not venereal, but dermatological, and which has included a comparatively small number of cases even of genital chancre, though a large number of syphilitic cases in the later stages come under my observation from one year's end to another.

CASE I.—CHANCRE OF THE LOWER LIP FROM A BITE—DIAGNOSIS OF EPITHELIOMA—EXCISION, FOLLOWED BY GENERAL SYPHILIS.

Elizabeth C., a woman of 52, consulted me on December 12, 1874, suffering with a generalized papular syphilitic eruption which had lasted about three weeks. On making inquiry, I found that three months previously, while toying with a man of suspicious character, she had been bitten upon the lower lip. The sore healed over, and she thought no more of it for several weeks, when a swelling began to show itself in the locality, which enlarged until it became half the size of a hazelnut, when the surface broke down into a running sore. Much alarmed, the patient sought advice of an eminent surgeon, who pronounced the sore a cancer and cut it out. The wound healed over quickly, but within a few weeks a fresh induration made its appearance in the site of the former one, while an eruption began to appear over the body generally. On examination, a small hazel-nut-sized induration was observed under the cicatrix of the operation, together with the general papular eruption noted above. The patient was placed upon appropriate treatment, and the lesion soon disappeared.

The peculiar interest of this case lies in the fact that an eminent surgeon, accustomed to seeing cases of epithelioma of the lip, failed in distinguishing the character of the lesion. The age of the patient certainly pointed to the possibility of epithelioma, while making contagion in amatory converse less likely.

CASE II.—CHANCRE OF THE UPPER AND LOWER LIPS FROM SIMULTANEOUS INOCULATION BY MEANS OF A BITE—TRANSMISSION OF THE DISEASE TO VARIOUS MEMBERS OF THE PATIENT'S FAMILY.

Maggie M., 15 years of age, had connection on November 14, 1876, with a young man whose history is not known, but who showed no signs of disease about the genitalia. She received no injury either to the genitalia or to the mouth at the time, but four weeks later a small sore appeared on the right half of the lower lip. No treatment was employed, and but little change took place in the appearance of the sore for a fortnight, when it seemed to suddenly spring into activity, the lower lip became swollen and raw, and a similar sore made its appearance on the opposing surface of the upper lip. A "lump" also appeared in the throat, and the patient began to experience general malaise, with pains in the bones, etc. About this time she came under the observation of a physician, who failed, however, to make a correct diagnosis, declaring the sores on the lip to be fever-blisters, and the swollen tonsils simple sore throat.

There had been, therefore, practically no treatment employed until the patient came under my notice, on February 28, 1877. At this time she presented well-marked indurated chancres of the upper and lower lip, the enlargement being in each case at least the size of a filbert and covered with a shallow ulcer. The lips were so swollen that they could not be brought together, and there was dribbling of saliva, with difficulty in taking food. The sublingual and submental glands were involved, and there was marked periosteal tenderness over the forehead. Under careful and continuous treatment she entirely recovered, but not before infecting her infant sister, who, in turn, infected her mother and a brother. Thus the entire family, with the exception of one brother, who appears to have escaped infection, contracted syphilis directly or indirectly from this undiagnosed case of chancre of the lips.

CASE III.—CHANCRE OF THE COMMISSURE OF THE LIPS IN THE HUSBAND—CONTAGION TRANSMITTED LATER IN THE HISTORY OF THE DISEASE TO THE WIFE, PROBABLY BY MUCOUS PATCHES ABOUT THE GENITALIA.

William P., a man of 30, presented himself on March 25, 1878, showing a sore at the left commissure of the lips. This had appeared in the form of a "fever-blister" about two weeks after certain toying with a prosti-

tute which did not involve connection. It was quite insignificant at first, but was accompanied from the beginning by a glandular swelling under the chin. A few days later the lesion began to enlarge and indurate, while the glandular development became constantly more marked up to the time of his examination. The sore was then in the form of a shallow erosion with a deep fissure extending into the labial commissure, and induration to the size of a cherry. The submental glands were markedly enlarged, although the general swelling was not so great as it had been some days previously.

The patient continued under my care and observation for more than a year, suffering with quite extensive mucous patches about the mouth and anus through the summer. While these lesions were at their height, he had connection with his wife, who consulted me on September 16 for a chancre of the left labium major of several weeks' duration. This ran the usual course, and was followed by a generalized eruption with mucous patches, the woman remaining under my care until April, 1879, when she was discharged cured.

CASE IV.—CHANCRE OF LOWER LIP, FOLLOWED BY MUCOUS PATCHES.

Annie P., 23 years of age, consulted me on December 20, 1880, for a persistent sore occurring upon the lower lip. She was engaged to be married to a man of questionable habits, and was probably infected by him through kissing, the date of which she was able to fix as August 1 previous. The sore was first noticed upon the lip two weeks subsequently. It grew hard and lumpy, and remained in this condition under local treatment until about November 15. Then a generalized eruption of a maculo-papular character appeared, accompanied by general malaise and mucous patches upon the tonsils. When examined, the remains of the initial lesion could still be seen on the lip, accompanied by some induration, and together with this a number of mucous patches on the upper lip and about the mouth. The patient was under treatment about a year, suffering occasional relapses of the mucous patches, but was finally discharged cured.

CASE V.—CHANCRE OF THE UPPER LIP PRESENTING AT FIRST MARKED DIFFICULTY OF DIAGNOSIS, FOLLOWED BY GENERALIZED SYPHILIS.

Kate C., a domestic, 24 years of age, was brought to me on the 7th of last May, by a well-known practitioner of this city, for the purpose of making an exact diagnosis of a suspicious sore upon the upper lip. No history of contagion was obtained. The sore had first appeared as an insignificant abrasion six weeks previously, and had gradually grown to its present size, giving rise to considerable burning sensation at first, but later being quite without feeling.

On examination, a peculiar lesion was found on the centre of the upper lip at the mucocutaneous juncture. This was a firm elevation the size of a ten-cent piece, flat, rising abruptly to the height of an eighth of an inch or more, and seated on a rather firm, inflammatory-looking mass of induration, which could be felt through the tissues of the lip and which was about the size of a small hazelnut. The lesion was of a dusky-red hue, and its surface, abraded and raw in the centre, showed a ring-formed, ill-developed vesicle about the circumference. Just within the lip on the mucous membrane was a lunular shallow herpetic ulcer with a yellowish base. The submaxillary lymphatic glands were markedly enlarged, particularly those on the left side. There were no general symptoms.

The gentleman in whose charge the case had been was inclined, chiefly from circumstantial evidence, to believe that the sore had been contracted by contagion and was syphilitic in character. But, judging simply from the appearances presented, I did not feel prepared to pronounce positively at the first examination, but took the case under advisement. In order to be on the safe side, however, we cauterized the abraded surfaces lightly with nitrate of silver to afford a protective surface, and cautioned the patient against coming into contact with other persons.

She was seen again on the 12th of May, when the sore had already begun to diminish in size and the glands were less swollen. At her third visit, on the 24th of the month, the lesion on the lip was somewhat larger again, being now an indurated lump the size of a split marrow-fat pea, of a pinkish color and without abrasion, while the glandular engorgement under the jaw was decidedly diminished. There were engorged glands in the post-cervical region quite perceptible to the touch, and a generalized sparsely-distributed papular eruption could be seen covering the limbs and neck and to a less degree the body. The mucous membrane of the pharynx was red and congested, but no mucous patches could be found here or anywhere about the mouth. The patient had suffered with severe nocturnal headaches for a week or more previously, coming on after midnight. She had also lost much flesh of late. The patient now confessed that she had frequently of late been exposed to contagion through the mouth from a suspicious quarter, but had never indulged in sexual intercourse.

The chief interest in this case lies in the extreme difficulty of diagnosis. The initial lesion when first seen by me resembled nothing so much as a lesion of herpes iris. The peculiar dusky-pink color, the circinate, partly-developed vesicle, and the evident tendency to spread on the periphery all were strongly in favor of that

affection. It is true that the glandular engorgement was suspicious; but still this, like a bubo in the groin, might have come from a sympathetic irritation due to a simple inflammatory lesion. Here a sure diagnosis seemed impossible until general symptoms developed, but superficial cauterization was practised to establish protection against contagion,—a precautionary measure which I should strongly urge in all cases of the kind.

CASE VI.—CHANCRE OF THE COMMISSURE OF THE LIPS DUE TO A BITE, AND FOLLOWED BY GENERAL SYMPTOMS.

Charles S., 43 years of age, consulted me on August 18 last, suffering from a lump and sore at the left commissure of the lips. His account of himself was that on the 16th of June he had been bitten in the mouth by a prostitute who showed some signs of an eruption about her person. No sexual intercourse had taken place at this time, nor for some months previously.

Within two weeks from the date of this accident the patient began to observe a "pimple" in the left commissure of the lips, which became fissured, and grew in size for several weeks, coming to a stand-still a week or so before I saw him. At that time—two months subsequent to contagion, and six weeks after the appearance of the initial lesion—the patient presented a hickory-nut-sized mass of induration at the left commissure of the lips, at which point was a deep callous fissure extending half an inch inside of the mouth and about a quarter of an inch outside. Within, the buccal mucous membrane showed a silvery-gray roughened eroded patch, while outside a shallow ulcer, the size of a ten-cent piece and of a roundish outline, could be seen on a sharply-defined hard base. Taking the cheek between the thumb and forefinger inside and outside of the mouth, the sharply-defined nodular character of the chancous induration could be very distinctly felt. The sublingual and submaxillary glands on the affected side could be felt distinctly, although not very markedly enlarged. The post-cervical glands were well marked to the touch. The genitals were closely examined, but showed no sign of disease.

The fissure and erosion within the mouth were touched with dilute solution of nitrate of mercury, while a plaster containing *ung. hydrarg.* was applied to the external sore. The patient was strenuously warned of the danger of contagion.

Under the local treatment the sores healed over entirely within two weeks, while the indurated lump became lessened in size by nearly one-half. At a visit paid a week after the patient's first appearance I caused him to strip completely, and then found him displaying a well-marked profuse macular eruption,

the existence of which I pointed out to him to his great surprise. The patient was then at once placed upon mercurial treatment, and is still under observation, the initial lesion having now almost entirely disappeared.

This series of cases does not include all that have come under my notice. Several others I have refrained from publishing because the evidence of their existence was only circumstantial, although to me convincingly strong. The chief interest in these cases lies, I think, in their comparative frequency, in the simple and innocent manner, so to speak, in which they were contracted, and in the great liability to errors in diagnosis on the part of the practitioner, with possible disaster from contagion to others as the result.

In speaking of these chancres of the lips, Mauriac says that they may occur in any form, minimal, very superficial, epithelial, and erosive, like a patch of herpes, scarcely indurated, and impossible to diagnosticate except for the submaxillary glandular engorgement. On the other hand, they may be very large, and Mauriac speaks of two which were as large as a walnut or a lady-apple, and situated upon the lower lip. Of these varieties only the last is represented in the cases above noted, Case II. being one where the general induration, swelling, and deformity were present to a marked degree. My other cases are of an average character, none, as seen by me, presenting the minimal appearance described by Mauriac. The commoner forms of chancre of the lip are flat or rounded, pseudo-membranous upon the mucous membrane inside of the lip, and crusted when occurring outside on the skin. The slight fissures about the lips, so common in some individuals, are very easily inoculated, and are converted into fissured chancres. The most positive sign that we have to deal with chancre of the lip is the involvement of the submaxillary glands. Occasionally, however, we may meet with this same condition following a simple sore of the mouth. Of course the occurrence of general symptoms will settle the diagnosis, and these, in the form of malaise, headache, lassitude, and loss of flesh, with occasionally pains in the bones and joints, are to be looked for in all suspicious cases which can be kept under observation. The occurrence of a general eruption must, of course, be looked for, and, as this when macular may escape the

patient's observation, it is as well to draw his attention to the possibility of such an occurrence, and to examine the chest, abdomen, and trunk generally from time to time, as well as the more visible parts of the skin, to be sure that a transitory macular rash does not escape notice.

Chancres of the lip are sometimes painful. They are very apt to crack and bleed, particularly when situated in the median line. Considerable tumefaction of the surrounding tissues may take place, especially when the chancre is situated on the lower lip, so that a sort of prolapse of this member may occur, the lip falling out and down on the chin. The induration in these cases is sometimes diffuse, but it is always firmer than simple inflammatory induration, and in the body of it the lesion itself can be felt as a still firmer circumscribed hardening. On the mucous surface of the lips the chancre is nummular, flat, or slightly elevated, and is rarely ulcerated.

The enlargement of the submaxillary glands, which was not very marked in any of my cases, and in some of them was so slight as to escape mention in the notes, occasionally attains considerable proportions and causes a diffuse tumefaction of a part or the whole of the buccal floor. For this reason, patients with their puffy, indurated lips and swollen lower jaw sometimes, at first sight, resemble scrofulous persons.

CASE VII.—CHANCER OF THE TONGUE, FOLLOWED BY GENERAL SYPHILITIC SYMPTOMS.

Bessie O'S. was one of a group of male and female attendants in a public institution in this city who carried into practice advanced communistic ideas on the subject of syphilitic infection. That which each possessed was shared by all the others. Peter O'C. was under my care with stubborn mucous patches about the tonsils, and later on the commissures of the lips, and about the velum palati and anterior half arches. He was under my observation and care from January to April, 1878. Some time in January the patient conveyed the syphilitic contagion to Mary B., at least so this patient informed me two years and a half later, when she came under my care for late ulcerated lesions of the forearm. When Bessie O'S. consulted me, on February 2, 1878, Peter O'C. was in full tide of syphilis in the mouth. Whether he was the source of her contagion or not I do not know. She told me she had a friend, "Mr. R.", among the attendants, who frequently kissed her, and

this friend may have been Peter O'C. or another member of the group. However this may have been, her history was as follows. About December 10, six weeks to two months previously, she observed a small sore near the tip of her tongue, and two weeks later was attacked by a violent sore throat which confined her to bed and which was called diphtheria. From that time until the date of her examination she had failed a good deal in flesh, and when I saw her she looked pale and anaemic to a marked degree. There were no lesions on the body. On the end of the tongue, a little to the left of the tip, could be seen a small roundish ulcer, pin-head-sized, and covered with gray slough. This was seated upon and surrounded by a mass of induration the size of a large marrow-fat pea split. On touching the lesion with a pointed stick of nitrate of silver, the central slough was wiped away, showing a raw moist surface beneath. The tonsils were swollen, and showed very shallow mucous patches.

Placed upon active treatment, the patient recovered her health, the induration gradually disappeared, but mucous patches kept on recurring during six months. In the autumn the patient returned with a squamous and incipient pustular eruption about the toes, and later new mucous patches appeared in the mouth. She disappeared late in the autumn, still not entirely cured.

I have no comment to make on this case, other than to point out that the lesion on the tongue was evidently the initial lesion of the disease, and that when I saw it it had probably taken on the appearance of a mucous patch, while still retaining the characteristic induration. I regret that my scanty notes give no intimation of the presence or absence of subhyoid or other lymphatic engorgement. This could not have been at all marked.

CASE VIII.—CHANCER OF THE FACE CONTRACTED IN SHAVING, AND FOLLOWED BY MARKED GENERAL SYMPTOMS OF SYPHILIS.

James F., 53 years of age, consulted me on July 17, 1882, giving the following history. Six weeks previously he had been shaved at a barber's shop of a suspiciously dirty character, in a low quarter of the city, and had been cut in the face just to one side of the chin. Two or three days later, so the patient asserted, a slight enlargement commenced to show itself at the seat of the wound, which increased gradually and progressively in size until, at the time of my examination, it presented itself as a smooth, firm, reddish lump, the size of a hazel-nut, seated in the tissues of the cheek. The surface was unbroken; there was no tendency to ulceration or even abrasion. The submaxillary lymphatic glands

were very much enlarged, and the post-cervical glands also showed considerable engorgement. The suboccipital and supra-trochlear glands were not perceptible.

A few days before I saw the patient his throat had begun to show symptoms of soreness, and on examination a mucous patch could be seen under the tongue, and pain referred to the laryngeal region seemed to indicate the presence of a lesion at that point. A generalized macular eruption was displayed over the body, limbs, and palms of the hands, with a few papular lesions here and there.

The patient was placed upon mercurial treatment, under which the lesions gradually disappeared. He fell away in flesh greatly at first, and became quite emaciated, but gradually recovered, and when last seen, about the end of December, showed no lesions excepting a few mucous patches about disappearing.

Although it is not an uncommon thing to find patients attributing their syphilis to inoculation by means of a razor, yet the actual occurrence under the eye of a chancre due to this method of inoculation is rare. In this case the disease showed itself with more than the average severity, as shown by the unusual emaciation and weakness of the patient. No malignant eruptions (as ulcers, etc.), however, were manifested.

CASE IX.—MAMMARY CHANCRE, FOLLOWED BY LONG-CONTINUED VARIED, AND REBELLIOUS GENERAL SYMPTOMS.

Elizabeth B., 28 years of age, first came under my care on April 12, 1876. Eight weeks previously, her lover, who she said always suffered with sore mouth and cracked lips, while toying with her bit her left nipple slightly. The trifling wound passed unnoticed for about two weeks, when she observed a small pimple upon the nipple. This soon became larger, moist on the surface, and painful, and the breast became inflamed and hard. Between five and six weeks after the wound of the nipple occurred, a scanty papular eruption made its appearance over the body, and the patient's health began to fail. She suffered malaise, pains in the bones, and general constitutional disturbance. Within a day or two previous to her visit to me the patient began to feel symptoms of sore throat.

On examination, the initial lesion appeared as a semilunar or crescentic ulcer the size of half a dime, situated at the outer border of the areola; the surface, sloping gradually from the edges, which were not raised or everted, showed an eroded cavity covered with yellowish débris and exuding a small quantity of sero-pus. The sore was situated on a base

of cartilaginous hardness surrounding it like a ring and raised somewhat above the general surface of the skin. There was a sparse but well-marked papular eruption scattered over the body and limbs.

Placed upon treatment, the initial lesion and the papular eruption gradually disappeared, but a series of mucous patches and the bad condition of the patient's general health necessitated tonic as well as specific treatment continued through a long period. In August, only six months after the initial lesion, a rupial sore appeared upon the leg, and the patient was emaciated and enfeebled, but by the end of the year she seemed entirely well. She was under observation for three years, suffering from gumma of the tongue, serpiginous ulceration over the sole of the foot, etc.

CASE X.—CHANCRE OF THE LOWER EYELID CAUSED BY INOCULATION THROUGH A PUNCTURED CONTUSION—CONFRONTATION WITH THE SOURCE OF THE DISEASE.

As this case shall be reported in full elsewhere, I shall only give the chief points. The lesion occurred in a young man who received a blow below the left eye at the hand of a friend. The immediate tumefaction being considerable, the contusion was punctured with a penknife and sucked by the friend. The sore, a typical erosion on an indurated base, developed in due time, and was seen by me when at its full development. I looked up the friend within a few days, and found him in full tide of florid syphilis, with mucous patches covering the inside of his mouth and the side of his tongue.

I might almost double the number of cases of extra-genital chancre above given if I should include all those which have come under my notice. I have, however, omitted all in which I have not myself seen the initial lesion and followed its evolution so far as to be able to give evidence as to its true nature. My object, as I have already said, has been to point out the daily possibility of the occurrence of chancre of this nature, and to indicate some of its features, and, since I have not intended to write a complete article on the subject, I have not thought desirable to give a list of references. Bumstead and Taylor's well-known work, and the files of the *American Journal of Syphiliography and Dermatology* and the *Archives of Dermatology*, afford perhaps the best field for any one desirous of informing himself of the cases of extra-genital chancre reported of late years in English. The French text-books, Fournier and others, with the *Annales de Dermatologie et de Syphiliographie*, afford a still larger list of cases.

THE EXAMINATION OF APPLICANTS FOR LICENSE TO PRACTISE—A MEANS OF RAISING THE STANDARD OF MEDICAL EDUCATION.

BY EDWARD JACKSON, A.M., M.D.,
Philadelphia.

Read before the American Academy of Medicine at the meeting held in Baltimore, October 28, 1884, and recommended for publication by the Council.

THE development of educational institutions may be likened to the development of races of living beings, in that it is determined by what may be called inherent tendencies directed and controlled by external influences. In the case of medical schools, the inherent tendencies reside in the *personnel* of their faculties and the systems of their organization. The external influences, or environment, are to be found in the attitude of the medical profession and the general public towards them and their work, in the bearing of legal enactments upon them, and in the education and desires of the classes from which they have to draw their students. And here, as in the evolution of living beings, environment has full sway over inherent tendencies, fostering such as are in harmony with it, defeating and overcoming those that are not.

Movements for the improvement of medical education have heretofore worked too much on the supposition that the schools could change everything themselves, failing to realize that they are hedged about by influences and bound down by laws of competition against which any effort they may make is practically powerless. I believe that more may be accomplished by so changing the environment of medical schools as to bring it more fully and directly in harmony with all the efforts they may henceforth make to raise their educational standards. As one of several movements tending towards such a change of environment, I ask you to consider the establishment of State boards of medical examiners, whose certificate of fitness should be the only legal qualification for the practice of medicine.

Medical education will only reach a proper standard and properly keep pace with the progress of the time when there is between those engaged in medical teaching a direct and controlling competition to excel in the thoroughness and practical value of the instruction they give. In this

country there is now no such direct and controlling competition. Why? In the first place, there is no direct competition because no part of the general public has the opportunity of passing on the merits of more than a few of the schools, and its judgment of them must be based on such knowledge as it can get of the acquirements or deficiencies of a very few of their graduates, perhaps but one or two from each, and these, as is generally understood, may be entirely exceptional among their fellows in the fulness or meagerness of their attainments, the diploma of every American medical school being bestowed on men representative of both the extremes of medical knowledge and medical ignorance. We of the medical profession cannot estimate the goodness or badness of the teaching in the various medical schools of the country, because we have no data upon which to found such an estimate, and the general public, with no more data than we have, are far less able to judge of the matter, if such data were furnished them.

Again, in the absence of direct competition to excel in thoroughness of teaching, such competition as there may be in this direction does not and cannot control the policy of the schools. This is so because most medical teachers are also engaged in other business; and the advantage that accrues to them from medical teaching accrues in other ways than by the reputation for teaching well. In this country the professors control the medical schools. They are unhampered by State control or conditions of endowment, and the board of trustees exists rather as a figure-head or a technicality. And in every faculty, if there be any who look to medical teaching to furnish the larger part of their income, or who base upon it their hopes of fame, they constitute an insignificant minority. To the large majority of teachers the chief rewards of medical teaching are the opportunities it offers for the enlargement of practice and the attainment of fees, or material for original research. The professorship is a certificate given by the board of trustees, but representing the judgment of the medical faculty, that its holder is eminent in a certain particular department of medicine; a certificate that is advertised to the profession and to the general public in the published circulars and announcements of the school,

and by appended title, and by word of mouth. It is a certificate worth having. Then, again, simply to stand in the relation of teacher to young men, many of whom will go out to take prominent positions in the community, is to have an opportunity for achieving reputation and attracting clients that is almost unequalled.

It is, perhaps, not accurate to say that we have no data upon which to grade the different medical schools of the country. There is one way, and only one, in which we might, or the general public might, arrange them; they might be arranged according to the size of their classes. By that, and only by that, can we judge of the success they achieve, and inferentially of the success they deserve. So, whether the medical teacher finds the chief advantage of his position in the fees he receives for teaching, in the opportunities for practice that his teaching opens up to him, in the material it brings him for original research, or in the reputation and influence that come from the teaching itself, the extent of that advantage is measured by the number of students he teaches.

The existent competition is for large numbers of students, and to secure them the first attraction that the schools have to offer is the degree of Doctor of Medicine. This degree has been borne by many great men; it has become, in this country, the badge of membership in a so-called liberal profession; but a more weighty consideration than these is the fact that it is required by public opinion, and in some States by statute law, as a prerequisite to entering upon the business of medical practice. As matters now stand, medical schools use this degree not to honor themselves in the eminence of those upon whom it is bestowed, not to guarantee to the public the professional fitness of those who bear it, but as a bait to draw students. And it draws the student not by the honor which once clothed it, but has now departed, but because in the present state of public opinion and statute law he must have the degree before he can undertake, with any fair prospect of success, to make a living by the practice of medicine.

The other means by which a school attracts students need not be dwelt upon. Suffice it to remind you that chief among them is the reputation of individual members of its faculty as compilers, original investigators, or practitioners, not as teachers.

Then come the boasted attractions of museums, libraries, and clinical facilities, that make a fine display, but which are of little value to the student until he has considerably advanced in his acquirements,—farther, indeed, than many get before graduation. After these come free scholarships, cheap boarding, etc.; but on the list of attractions, strictness in the requirements for graduation comes last, or more generally is omitted entirely.

Now, it seems to me that the change most urgently needed in the influences bearing upon medical schools from without is that which will deprive the degree furnished by the schools of its purely trade value as a preliminary to money-getting, and will substitute for it a certificate of the attainment of a certain minimum standard of knowledge of the arts and sciences of medicine, given by a board of disinterested examiners acquainted with those arts and sciences and with the needs of the community. The creation of such a tribunal, furnished, in the persons of medical graduates of various schools, with the needful data, and competent and interested to pass impartially upon the thoroughness of the teaching those graduates have received, would establish that direct competition for thoroughness that is so much needed, and would go far towards giving such competition a controlling influence. If the relegation of the medical degree to its proper place as a scholastic honor pure and simple did not induce the schools to sufficiently respect their reputations in conferring it, the publication of the fact by the rejection of their graduates would certainly have the desired effect.

Other sufficient reasons for the establishment of State boards of medical examiners could be discussed, but it is only the influence which they might exert over medical education that I would urge here, and from the point of view that such an influence is one of their most valuable and important functions, I wish to say a few things as to their constitution and how they should go about their work. Their work is not to confer medical honors; it is simply to protect the public from gross ignorance in its medical advisers, and incidentally to remove from medical schools the temptation to swell their classes by the pretended education of men unfit to acquire a knowledge of medicine.

I believe that it would be entirely prac-

ticable, and in many respects it would be most advantageous, to have but a single examining board in each State. The responsibility would then be undivided. Its doings would attract more general attention than would the work of a number of boards, each of but local importance. It might, from time to time, hold examinations in various parts of the State, if that were considered necessary; but certainly the fairness of the test and the weight of the verdict would be greater to have all applicants go before a single board.

That no law can be secured or enforced which does not take cognizance of certain dogmas or so-called schools of therapeutics is certainly true of many parts of the country, and this constitutes one of the serious obstacles to any such progress as we are hoping for. My own preference would be, that it should be met by not examining with reference to therapeutics through the agency of drugs, since, even aside from exclusive dogmas, but few lines of drug treatment are entirely agreed upon by the regular profession, and it would be impossible to examine applicants with fairness upon matters of individual preference and opinion. Probably, however, a more popular way would be to hold such examinations, and to provide for the so-called schools of medicine by giving homeopaths and eclectics representatives in the boards, with authority to pass, on that particular branch, such applicants as might desire to be examined by them. I see no very serious objection to some such plan, since the unity of the healing art would be sufficiently vindicated by the single examination on all other branches.

The examiners should receive a fixed compensation, in no way dependent upon the number of applicants examined or passed by them. The superiority this alone would give the State board over the faculty of the medical school need not be dwelt upon. For similar reasons, the examiners should not be involved in the business of medical teaching; neither should they be chosen by those engaged in teaching, but rather by bodies representative of the profession, as the State medical societies, or by the representatives of the whole people, the governors or legislatures of the States.

The examiners should have long official terms, which should not expire simultane-

ously, such a provision being necessary to secure stability and continuity in the policy of the board.

The examinations should, as far as possible, be written, for written examinations, besides being most easily made fair, uniform, and thorough, can be matters of record. But above all they should be practical.

In conclusion, let me reiterate my most earnest belief that such State boards should have for their function the examination of applicants for the license to practise, and not the endorsing of the diplomas of certain medical schools, for the public is more abused by the disparity in the attainments of men receiving their degrees from the same faculty than by any disparity existing between the requirements of the different schools that lay any claim to respectability. Such boards might have their sphere of usefulness increased by power to conduct or supervise examinations in the branches of learning that fit men to become students of medicine, but this, and the right to be influenced by considerations of moral fitness or unfitness of the candidate, should be the only extension of their powers. Let them attend to their principal duty, without hindrance from diverse and distracting interests and responsibilities.

REPORT ON THE PROGRESS OF OTOLOGY.

BY CHARLES H. BURNETT, M.D.,
Philadelphia.

(Continued from page 43.)

NEURALGIA, CHIEFLY IN THE TRACT OF THE SECOND BRANCH OF THE TRIGEMINUS, CAUSED BY AN EXOSTOSIS IN THE EXTERNAL AUDITORY CANAL.

POLITZER gives a résumé of an article on this subject by Moos in the *Annales des Maladies de l'Oreille, du Larynx*, etc., May, 1884.

The patient, in this instance, complained originally of an abscess in the ear, followed by a purulent discharge. In March, 1883, there occurred a painful swelling of the right external auditory canal, soon followed by attacks of violent pain, occurring sometimes in the morning and sometimes in the evening,—at first at long intervals, but finally more frequently and with increasing intensity. These pains affected

chiefly the region of the second and third branches of the trigeminal nerve. The right jaw especially became so sensitive in chewing that finally the patient chewed only on the left side.

Examination of the ear revealed in the right external auditory canal three exostoses about as large as a pea, situated on the posterior, the superior, and the anterior walls respectively. These were nearly in the same plane and very close to one another. Upon touching these with a probe, the patient was positive that from the hindmost of them the attacks of pain took their origin. On the 9th of July, 1883, Prof. Moos removed the posterior exostosis by means of two incisions with a small bistoury. The superior one was left intact. The anterior exostosis was incised. After the bleeding ceased, the external auditory canal was plugged with boric acid and salicylated cotton-wool. Immediately after the operation the pains ceased, and have not returned, and on the same day, for the first time in many months, the patient was able to chew upon the right side of his mouth. Subsequently some granulations sprang up, and there was a purulent discharge, which, however, soon diminished and finally ceased entirely during a course of baths at Ragatz.

The original cause of the formation of the exostoses was probably a chronic purulent inflammation. It is very certain that at the seat of their development there occurred a tension and a torsion of one of the branches of the trigeminalis, to which can be attributed the painful paroxysms of the disease.

THE TREATMENT OF SUPPURATIVE OTITIS MEDIA.

Bürkner (*Berlin. Klin. Wochenschrift*, No. 1, 1884) holds that, in addition to nitrate of silver in strong solutions (Schwartzé) and powdered boric acid (Bezzold), a valuable remedy for suppurative otorrhœa is found in corrosive sublimate and in the red precipitate of mercury. He has employed corrosive sublimate in two forms,—viz., by injections, and by instillations into the auditory canal. For injections he advises the one-per-cent. solutions of the sublimate, employing them in cases of fetid and abundant suppurations of the middle ear. For general use, however, he prefers warm instillations in the form of aqueous or alcoholic solutions

0.05 in strength. The use of more concentrated solutions has not been found painful. The effects of the sublimate are said to be remarkable in chronic cases, which nitrate of silver and boric acid have entirely failed to cure. The author has used the solutions of the sublimate in cases with small or with large perforations, and in both acute and chronic cases, and has cured at least half his cases,—no very great success, after all, in the estimation of your reporter, since the statistics of the dry, antiseptic treatments are far better, being from eighty to ninety per cent. of cures.

The red precipitate of mercury, on account of its insolubility, can be used only in a limited number of cases with advantage. It can be used only as a powder, and in small quantities, in cases of slight purulent secretion, with large perforations in the membrana tympani, since, like alum, it forms hard curds with the mucous secretions. In cases of hypertrophy of the mucous membrane of the tympanic cavity, and in granulations of the membrana tympani (*myringitis chronica*), the red precipitate, it is claimed by the author, produces far better results than boric acid. It is not to be used except in cases of extensive perforation, and not in combination with the boric acid or dry treatment of the ear.

DILUTE SULPHURIC ACID IN LIMITED CAVITIES OF THE FUNDUS OF THE AUDITORY CANAL.

In this connection, a suggestion of Woakes, of London, deserves a notice. In the *Annales des Maladies de l'Oreille*, etc., July, 1884, Dr. Woakes recommends the use of dilute sulphurous acid (B. P. nine per cent.) in cases where limited caries, either in the fundus of the canal, near the membrana tympani, or in the tympanic cavity, can be detected by the use of a probe. It is claimed by this author that when the fundus of an ear which has long been the seat of an obstinate otorrhœa is examined under good illumination, there will usually be found a spot of granulation-tissue seated either upon the membrana tympani or very near its periphery, on the wall of the auditory canal.

Such a granulation on the membrana marks the position of a perforation in it, the proliferating tissue proceeding from the mucous lining of the middle ear. If,

now, such a granulation mass be penetrated to its base with a fine probe, a slight grating sound will be perceived, indicating the presence of exposed bone. This, of course, demonstrates the existence of a limited caries or necrosis on the osseous walls of the drum-cavity. "Reference is not made in this statement to those gross cases of disease of the temporal bone, the nature of which is quite obvious to the casual observer, but rather to occurrences which may complicate, while they directly result from, an ordinary middle-ear catarrh, and which will assuredly not be recognized unless specially sought for in the manner above described."

To combat this condition, sulphurous acid (B. P.) diluted with three or more parts of water, according to the requirements of the case, has been used for the past five years, with general satisfaction. "If, as rarely happens, the external canal resents its presence and shows signs of irritation, the strength of the solution must be lowered, or its use discontinued for a time." The rationale of its action appears to be that when maintained in contact with the carious surface the dilute acid dissolves the earthy salts of the minute spicules of dead bone which project from the carious surface. It also removes the discharge from and disinfects the surface producing the necrotic spicules, and by its stimulating influence induces a healthy action, which rapidly ends in cicatrization.

The application of the dilute sulphurous acid is to be used only when exposed bone is felt in the fundus of the canal by means of a probe. The instillations are to be made warm, thrice daily, and allowed to remain half an hour *in situ*, the patient being in a suitable lying posture. In four or five weeks a cure can generally be effected. Prior removal of granulation-tissue is not necessary, except where its bulk prevents or retards the access of the acid to the underlying caries.

LARGE DOSES OF POTASSIUM OR SODIUM IODIDE IN SUDDEN DEAFNESS OF SUPPOSED SYPHILITIC ORIGIN.

Dr. Albert H. Buck, of New York (*New York Medical Record*, September 6, 1884), offers a series of brief histories of cases as a contribution to the subject of the daily administration, through a period of several days or weeks, of large doses of potassium or sodium iodide for the relief of sudden or rapidly-developed deafness, due appar-

ently to the presence of syphilitic lesions in the labyrinth, or in some part of the auditory nerve outside of this system of cavities, or, finally, in those parts of the tympanum which constitute the movable barriers of separation between this cavity and those of the labyrinth. The chief object of this communication is to throw a little light, if possible, upon the prognosis and treatment of what appears to be syphilitic disease of the labyrinth, and to induce others to communicate their experience in the treatment of such cases. All cases of syphilitic diseases of the middle ear are excluded from consideration. Those cases are chosen for study in which the profoundness of the deafness and the rapid manner in which it develops seem characteristic of syphilitic disease of the auditory nerve, rather than of catarrhal lesions in the tympanum.

Dr. Buck regards those conditions of total deafness which have been attributed to syphilitic disease of the labyrinth, and which have been reported by some observers as entirely cured in a few weeks by specific treatment, as probably not due to lesions in the labyrinth, as "it is not perfectly clear that middle-ear lesions may not have contributed materially to the deafness."

Accounts of five cases are then given, in the first of which, a man, 38 years old, ordinary anti-syphilitic treatment was carried out without any improvement in the hearing. In the second case, a man, 27 years old, the anti-syphilitic treatment at first consisted in daily inunctions of a five-per cent. preparation of Squibb's oleate of mercury, and the internal administration of the iodide of potassium three times daily, in increasing doses. The iodide of potassium was continued for six months, until the patient took five hundred and twenty-five grains daily. Profound constitutional effects were thus produced, but no improvement in hearing.

The drug was administered in all the cases according to the suggestion of Dr. F. R. Sturgis, of New York, in a saturated solution, so that one minim equalled one grain.

In the third case, a man, 45 years old, in the course of three months the administration of the drug was carried to three hundred and fifteen grains daily, and kept up two weeks, *without any unpleasant effects*, but also without any appreciable improve-

ment in the condition of the hearing. The treatment was then abandoned.

In a fourth case, a man, 52 years old, in whom, however, the syphilitic origin of the deafness was not entirely clear to Dr. Buck's mind, thirty grains of the iodide of sodium was given daily at first, and then increased, until in the course of a month for six days the patient took three hundred and sixty grains daily.

The hearing, however, was not restored in the slightest degree, and the tinnitus was not appreciably diminished. Treatment was then abandoned.

In the fifth case, a man, 40 years old, two days before seen by Dr. Buck, there had been decided vertigo, nausea, and double tinnitus; in a short time vomiting of mucus and bile at intervals for several hours. It was then discovered by the patient that he had lost the hearing of both ears. Examination of the ears revealed no lesions other than those of chronic catarrhal inflammation of both tympana. As the patient had been under Dr. Buck's care ten years before for syphilitic sore throat and with subacute otitis media, the mixed treatment just described was tried in this case. In four days the vertigo had nearly ceased, and the patient could hear a loud voice. In the course of a month it was learned that little or no improvement had taken place in his hearing, and that the tinnitus was still marked. Up to this time he had been able to take only ninety grains of iodide of potassium daily. The iodide of sodium could not be taken, as it nauseated him. In the course of a week the quantity of iodide of potassium was increased to one hundred and eighty grains, but this was soon abandoned, as the patient's stomach rebelled. Finally, this man took two hundred and seventy grains daily, but in a week it was abandoned, as it seemed to do him more harm than good. It certainly produced little or no effect upon the hearing, as he had to be communicated with by writing.

In conclusion, Dr. Buck says, "The treatment failed to accomplish anything worthy the name of improvement in all five instances, and yet, as has been observed in the cases reported by Dr. Roosa and Dr. Webster, essentially the same treatment may accomplish strikingly favorable results. . . . The only plausible explanation that I can give of the infrequency of our successes is this: A syphi-

litic gumma in the labyrinth, and especially in the cochlea, will rarely fail to produce damage from which recovery is scarcely possible. Treatment may lead to the absorption of the gumma, but it cannot readjust and render functionally useful those delicate and carefully-adjusted organs which the tumor has disarranged, and perhaps even destroyed. . . . In the cases reported by Drs. Roosa and Webster we may assume that the pressure had gone only so far as to suspend for a time the vibratory power of the cochlear structures, but had not destroyed or even seriously injured them. It is also possible that the gumma may occupy a position in the vicinity of the oval window and foot-plate of the stirrup, or in that of the secondary tympanic membrane (round window). A lesion so situated would be competent to annul the power of hearing, but it would not necessarily destroy it," which is essentially the view of the subject expressed by your reporter in No. 414 of this journal (October 6, 1883).

TRANSLATIONS.

THE FUNCTIONAL INDEPENDENCE OF THE TWO CEREBRAL HEMISPHERES—ITS DEMONSTRATION BY EXPERIMENTAL HYPNOTISM.—In a recent Paris thesis M. Berillon gives the results of researches into the physiological, independent activity of function possessed by the cerebral hemispheres, and quotes in confirmation of this view evidence from anatomy, physiology, embryogeny, cerebral thermometry, comparative pathology, human pathology, mental pathology, psychological observation, and more directly from experimental hypnotism. By following this path of investigation, which Charcot and Dumontpallier have enlightened by so much patient and laborious investigation, M. Berillon believes that he has succeeded in demonstrating in a manner almost irrefutable the duality of the cerebrum and the functional independence of the two cerebral hemispheres.

From experiments upon patients at La Pitié it was shown that hypnotism (1) may be localized in one hemisphere; (2) may be exercised simultaneously in the two hemispheres, although in different degree. Without stopping to consider the means of inducing unilateral or bilateral

cerebral hypnosis (further than to indicate that the condition was established by excluding one of the eyes by means of a bandage, and by thus acting upon only one retina or upon both in succession), we will give the conclusions contained in a *résumé* of the investigations of the author. The work is in two parts.

"In the first part are grouped methodically a large number of facts taken from divers branches of biological science, which appear susceptible of contributing proof to the theory of the functional independence of the two cerebral hemispheres. These facts are already known, and result equally from experiments and observation upon animals, and observation upon man.

"In the second part of the work there appear, on the contrary, a great number of facts entirely new, which in this case offer the special interest of being the result of experimentation directly upon man. These experiments are due to a mode of physiological investigation which is still seldom applied,—experimental hypnotism. By this it can be proved that in the human subject, by pursuing certain methods and at the will of the experimenter, we can

"(1) Suppress the psychic motor and sensory activity of one cerebral hemisphere (unilateral cerebral hypnotism).

"(2) Give to each hemisphere a different degree of activity (bilateral cerebral hypnotism, of different degree for each side).

"(3) The two hemispheres having equal activity, to create for each of them and simultaneously the manifestations of hypnotism of different nature and character (bilateral cerebral hypnotism of similar degree, but with different manifestations for each side)."

Referring to the latter form, the author explains this curious condition as follows: "That is to say, that the same individual can, in a hypnotic state, represent by each of his hemispheres a *distinct being* endowed with an individuality of its own. In such a condition, each hemisphere being complete by itself (although its action may be generally, from a stand-point of motility, limited to a single side of the body), and possessing within the limits of its attributes a special activity, one might say that man, whether from a psychic, sensory, or motor point of view, is really double; *in short, that he possesses two organs of ideation,—two brains.*

It would be impossible, the author says, in conclusion, to demonstrate experimen-

tally upon man, in a more striking or precise manner, the *cerebral duality* and the functional independence of the two cerebral hemispheres, than he has done by this novel method of experimentation.—*La France Médicale.*

ASEPTOL.—A phenol compound, termed orthoxyphenylsulphurous acid, has been recently introduced into therapeutics under the name of "aseptol," this title having been given to it on account of its remarkable germicide qualities, which excel those of carbolic and salicylic acids. Aseptol is an amber-colored fluid, of a density 1400; it has a slight odor, but is more pleasant to the smell and is less poisonous than carbolic acid. Last November Drs. Leroy and Van den Shriek, of Antwerp, studied the therapeutic applications of aseptol, and reported most satisfactory results as an antiseptic. It has the following advantages over antiseptics in common use:

1. It is very soluble in water.
2. It is very slightly caustic.
3. It is free from irritative qualities, and may be applied for a long time to the skin, the eyes, the bladder, etc.
4. Finally, its slight toxicity, which permits its use internally in considerable doses, and also the application of concentrated solutions in diphtheritic pharyngitis and laryngitis.—*La France Médicale.*

HYDROCHLORATE OF COCOAINE, THE NEW LOCAL ANÆSTHETIC.—Upon the recommendation of Dr. Koller, of Vienna, the muriate of cocaine has been used with surprising results as a local anaesthetic in ophthalmic surgery. Dr. Noyes having written a letter containing an account of the Heidelberg Ophthalmological Congress to the *Medical Record*, in which he described its almost magical effect, it has been tried by a number of New York surgeons. Drs. Knapp, Agnew, More, and Minor have performed a number of operations with its aid, using a two-percent solution of the drug (Merck's). Two drops at a time instilled into the eye to be operated upon for squint, for cataract, or for enucleation, repeated every five minutes, brought about such insensibility of the eye that no other anaesthetic was needed, and even in children painful operations were done without any suffering whatever. One of the experimenters declares that, "should cocaine in the hands of others meet with the same success that I have attained, it will mark an era in ophthalmology unsurpassed by any in modern times. Its use in other branches of medicine and surgery may be almost as important as in ophthalmology."

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, NOVEMBER 1, 1884.

EDITORIAL.

STATE EXAMINING BOARDS.

HE who has sown seed amidst derision because of its alleged want of vitality and the apparent poorness of the soil may well watch with pleasurable pride and self-congratulation the growing grain as it ripens for the harvest. It is thus we note that the State Medical Society, the Philadelphia County Medical Society, and the Philadelphia Medico-Legal Society have appointed committees to secure the passage of a law providing that no person shall, after its enactment, enter the practice of medicine in Pennsylvania save only by passing a medical examination before a State Board of Examiners. A valuable essay, in advocacy of this view, we gladly publish upon another page.

Many years since, we stated in these pages our earnest opinion that such a law as this should be adopted; and we see no necessity for here reiterating the reasons then assigned. We believe that the medical profession of the State are now persuaded that such a measure is needed for their own protection, as well as for securing the people against the ravages of uneducated practitioners. The discussion is no longer, Ought this thing to be done? but, How shall it be accomplished?

If the three committees are in thorough earnest, they can secure the passage of the law at the next session of the Legislature.

From whence cometh the opposition? Only is it to be expected from the medical schools; and these can hardly afford to act openly against the proposed law. Institutions with graded courses and strict examinations will naturally welcome such law, as making plain their superiority, and other schools can scarcely proclaim with advan-

tage their belief in their own insufficiency and weakness.

It is all-important that the law be carefully drafted, and it is plain, to our thinking, that certain principles should be involved in it. In the first place, there should be but one board in the State,—at least one for each "school" of medicine: otherwise there could not well be persistent uniformity of action: every board would be thinking of itself in comparison with another, and be very prone to guide its examinations, not by a simple sense of right, but, at least in part, by what its neighbor was doing. Moreover, one central board would be more dominated by a sense of responsibility, and more free from local feelings, than would local committees. It is no great hardship for the man who desires to enter practice to travel even the whole length of the State in order to obtain this privilege. Moreover, if the sessions were held in Philadelphia, as most of the candidates graduate in this city, they would be here ready for examination in the spring.

Another principle which should be clearly recognized is that the examinations should, entirely or in great part, be matters of record, and therefore be in writing, the examination-papers to be preserved for at least ten years, and the written questions to be published at the close of the examination. As some rejected candidates might not want their blunders preserved, they should have the right to withdraw their papers after signing a written acquiescence in the justness of their rejection.

A second important principle is the recognition of the ugly fact that there are several schools of therapeutics,—or schools of real and imaginary therapeutics, if exactly accurate phraseology be preferred. The difficulty can readily be overcome in one of several ways: (1) by having two examiners in therapeutics, and the candidate not to state which of them should

choose until he had passed the rest of the board ; (2) by having no examiner in therapeutics ; (3) by having various examining boards, one for each so-called sect in medicine. According to our present thought, the latter would be the best plan : there would be no mixing of the regular and irregular professions ; there would be no possibility of complaints by candidates of prejudices against them on the part of examiners other than the therapeutists, because of the candidates' therapeutic predilections ; there would be no jealousy and no struggle between sects concerning positions upon the board other than that of the therapeutist. We believe it would be best for all concerned to allow every *incorporated* State Medical Society to give a list of names to the Governor of the State, out of which he should appoint an examining board, who should license to practise in accordance with the rules of said society. The objection, of course, is that the inferior sects of practitioners would appoint inferior boards and open the doors wide to applicants. If, however, the examination-papers were accessible to every one, this evil would not, we think, be uncurbed, and, at any rate, the regular profession might maintain its own dignity. The State Board of Health, when created, or some other body, might have the duty laid upon it of reporting on the examination-papers at intervals.

A LESSON FROM THE ELECTRICAL EXHIBITION.

THE Electrical Exhibition of the Franklin Institute of this city has closed, after a very successful run,—as the dramatic critic would say,—and the various committees of judges have about finished their tasks, though, in some cases, still very actively at work. The display of medical electrical apparatus was distinctly inferior to what might have been expected, several of the largest manufacturing houses in America not being represented. But

there are a few conclusions to be drawn or facts stated that seem worthy of note here. The old, well-known story of the powerful current setting towards quackery in all things electrical was most marked. There were but two, or possibly three, honest electro-therapeutical exhibitions in the whole list. The medical profession is in part to blame for this, because many physicians use batteries sold under false claims, and even a goodly number of practitioners do not know that such claims are false.

Every battery which is offered, as many of them are, as giving a galvanic current from the primary faradic coil, is fraudulent in at least this claim. The faradic current is induced only at the making and the breaking of the circuit. When the circuit is closed, the galvanic current, of course, passes through the closed circuit and does not enter the body ; when the circuit is opened, of course the galvanic current cannot pass anywhere, because there can be no current, it being the cessation (*i.e.*, breaking) of the current which makes the induction. It is plain that a force cannot be existent and non-existent at the same time, any more than can a material substance. If the galvanic current exists and is not interrupted or broken, there can be no induction.

Again, faradic batteries which profess to get divers mysteriously-endowed currents by using a multiplicity of coils made of wires of different sizes or of different metals, methods of winding, etc., are fraudulent in their claims. There is but one kind of galvanism, and currents can only vary in strength and electro-motive force. Alongside of the highly scientific batteries, dynamos, and what not of the exhibition were medical batteries asserting practically that there is such a thing as a copper electricity, an iron electricity, a silver electricity, and so on. All of which reminds one of certain parts of London, in which the lowest slums abut against the fine palaces of the money-kings.

One word more concerning faradic batteries is all that is here necessary. No physician should buy a faradic battery which is not provided with a slow rheotome or current-interruptor, and this ought to be so constructed that it can be adjusted to run at the rate of sixty per minute, or with a swiftness approximate to the slowest beat of the rapid rheotome. On only two faradic batteries at the Exhibition were such rheotomes.

Most of the portable galvanic or chemical batteries which were exhibited are modifications of the old Stohrer battery, and are open to very serious objections. The liquid is a solution of the bichromate of potassium in diluted sulphuric acid, and is excessively corrosive. The connections are very close to the liquid, and therefore very prone to become corroded. The closeness of the cells is such that the joints are exceedingly apt to get loose with use and to allow of leakage. When it is further remembered that this form of cell is one of the most rapidly polarized and exhausted of any known, it can be well seen that a portable galvanic battery for practical use is, so far as the exhibits alluded to are concerned, still a desideratum.

There were two portable galvanic batteries shown at the Exhibition which are not widely known, but which are the most promising forms we have ever seen. One of these, exhibited by Mr. Otto Flemming, has modified Leclanché elements. The electro-motive force of these elements is not nearly so good as is that of a freshly-charged bichromate battery, but in permanence and regularity of action and in freedom from corrosive properties they are almost unrivalled. With a change in the mechanical arrangement, so that the cells could be more permanently closed, this battery might prove to be thoroughly adapted to our wants.

Another form of galvanic battery having remarkable electro-motive force, and therefore especially adapted to medical use, is that invented by Mr. Partz. The

plates in this battery are of carbon and zinc, as in the ordinary sulpho-bichromate-of-potash cell, but the fluid is a solution of chloride of zinc and bichromate of ammonium. The inventor claims that this form of element has an electro-motive force nearly equal to that of a Grenet cell, whilst polarization takes place so slowly as to be practically non-existent for medical purposes, and exhaustion of the fluid is so slight that a battery will do a year of ordinary medical work without replenishing. A very important feature is that there is no "local action" in the battery, and that, consequently, immersion of the plates does not have any effect upon them or the fluid, so long as the circuit is not closed. As a result of this, the cells can be made perfectly tight and at the same time be kept small. There is therefore no danger of leakage during transportation, and the weight of a charged battery of fifteen cells is only fourteen pounds.

Both the portable Leclanché battery of Mr. Flemming and the Partz battery were referred to the committee of judges, for report upon their electro-motive force and upon their "rate of fall,"—*i.e.*, loss of power during use. Until such report is made public we may well suspend judgment, but it does look as though we might expect in one or both of them a solution of the problem how to make a practical portable galvanic battery for medical use.

ONE of the most important duties performed by the International Medical Congress held at Copenhagen was the passage of a resolution creating an International Committee for the Collective Investigation of Disease. Professors Jacobi, of New York, and N. S. Davis, of Chicago, were appointed as representatives in the United States. It is to be hoped that the general profession will aid the committee, in order that satisfactory progress may be shown at the meeting of the International Congress at Washington.

NOTES FROM SPECIAL CORRESPONDENTS.

LONDON.

THE winter session of 1884-85 has now commenced, and at many of the metropolitan schools the old custom is observed of giving an address to the students, old and new. Some schools have abandoned the address in favor of a *conversazione*; but which really impresses the student most is a matter on which opinions may and legitimately can differ. When the reasons why a man is chosen or adopted as one of the lecturing staff of a medical school are known and understood, and his power of exposition has a known value, then it might be possible to make the worth of the introductory address a matter of calculation. However that may be, the addresses of the present year have not fallen behind their predecessors. That at University College was delivered by Dr. W. R. Gowers, one of the physicians of the hospital, a man who has done good work, and who holds a good position as one likely to uphold the reputation which University College has deservedly won. He first welcomed the new-comers, and then pointed out the wide range of information which is required for a medical man. It is not merely the scope of the examination-questions, entailing some acquaintance with about half the sciences, but the requirements of practice, which touch nearly every branch of science. "The life-work of the medical man," he said, "was the prevention, cure, and alleviation of the diseases of man. Whatever else man is, he is part of the material world, and is, moreover, the highest and most complete phenomenon yet discovered, or likely to be discovered,—that in which the interactions of force attain the highest elaboration known to us. The most complete form of matter, the most delicate adjustment of force, is presented by a nerve-cell of the brain. Of the slow, never-resting tide of creature-development, sweeping on through ages far behind us, ebbing and flowing, and yet, with sure advance, moulding into new forms and higher phases the mysterious elements on which it works, the ultimate result, the highest issue, is the subject of your study." This was a tolerably stiff bit of evolution for the freshmen; but, then, breadth of view and untrammeled thought are known to obtain at the college in Gower Street. He continued, "But elevation entails instability. The exquisite capacities of organic bodies are obtained by a delicate adjustment of restrained energy, ever striving to gain some lower and more stable state, held in an equilibrium that is destroyed by the slightest change, and is, indeed, in constant process of destruction and renewal. Hence, by altered constitution

and function, a living organism responds to every variation in the conditions outside it,—to every change in temperature, mechanical forces, chemical constitution, of its surroundings, and doubtless, though more obscurely, to every alteration in electrical and, perhaps, magnetic states. To every change in earth and air the human frame is sensitive. Each motion of our rolling world, each wave of light from the far-off sun, each wind that bears to us the warmth of tropic seas or cold of mountain snows, determines some change in us. An alteration of the soil on which we live may modify completely the processes of life." Consequently the medical man, in order to cope successfully with the disturbances within the organism set up by such a myriad of causes, must have far-reaching, wide, almost all-embracing information to deal with the causes which are producing the results; and a tolerably trying outlook for the juvenile mental powers he sketched. Though, of course, what he said is quite true. And those youngsters, when they become gray-haired and skilled practitioners, will have learned the multitude of varied causes which lead to a yellow-furred tongue, telling of disorder of the liver, from causes varying from the east wind to a business complication entailing worry. But in the mean time we hope that they will learn to give a dose of calomel and a few grains of jalap, when such evidences of liver-disturbance are present, until they can deal with the causal relations of it. When they can calculate these, then probably they can do away with the necessity for the mercurial cholagogue and purgative.

Having, then, pointed out the object of the various subjects of study required in a medical curriculum, he passed on to a very important matter (on which, indeed, an address on the termination of a college career would not be out of place), and that was the importance of entering into the feelings and thoughts of sick persons, so as to deal with them with proper consideration. To enter fully and deeply into suffering with the sympathy that is not only intelligent, but "with suffering," he admitted was "impossible. A doctor's work would then be simply beyond human endurance. To him, as to no other, the darkest side of human nature is ever open; in his ears the deep undertone of sadness rings through every chord and melody of life,—now in the wail of pure distress, now in the discords of passion, now rising into the sweet but still, sad music of patient resignation and of self-sacrificing love. Well it is for the world that it is possible to understand without enduring, or the helpers would be few. As it is, our lives are often saddened by the suffering we cannot but share. No statement more untrue was ever uttered than that familiarity with suffering destroys the capacity for sympathy in medical men. It is one of the many statements that are made

regarding the members of the medical profession—misconceptions of their feelings and their motives—which could not be made if the character of the profession as a whole and the value of its work were duly appreciated." Here Dr. Gowers spoke up for a much maligned profession in a manner befitting his position. After that he went into some detail as to the actual amount of good done by the profession in a single year. He pointed out how active was the part taken by the profession in the prevention of disease, and stated that no other members of the community strove so hard to deprive themselves of at least half their living. How far, by our present capacity to rear delicate children, the profession was providing itself with work in the future was a matter lightly and cautiously touched upon. He then had a few words to say about the rewards of our profession, which, he pointed out, were other than pecuniary; for of the last it would reap but little. Nor did he say much of honors granted to it.

At St. Thomas's Hospital the address was given by Sir Risdon Bennett, consulting physician to the institution and an ex-president of the College of Physicians. He also took the line of the wide information required by a medical practitioner, including psychology: "It needs but a slight acquaintance with the practice of medicine to learn how greatly the equilibrium of health depends on the due regulation of psychical as well as physical force." Indeed, he thought psychology belonged quite as much to medicine as to those who devoted themselves to psychiatrics. Disease in its manifestations was modified in several ways by mental states. He remarked that "At the bedside the practitioner has to do with something that cannot be studied in the dissecting-room,"—which was certainly true; and he might have stated, equally truthfully, nor in the pathological room either. It will be long ere the microscope can demonstrate in a brain-cell a life of self-devotion to others, or even the effects of an overwhelming ambition. Then he referred to the wide domain of therapeutics, and showed how hygiene, diet, and regimen were a part thereof. Indeed, he had a word to say in favor of an acquaintance with cookery. He said, also, with the wisdom born of long experience, "Whatever the genius of some, or the special opportunities of others, may enable them to expect, it is by close observation of nature—which all may and are bound to cultivate—that most of us can hope to attain what should be the desire of all;" and then concluded with some quotations from Sir Thomas Browne, which apply as well now as when first uttered.

At Westminster, Dr. A. Hughes Bennett, the respected son of an illustrious sire, discussed "Medicine as a Profession." He pointed out that the aim and object of life, from a worldly point of view, is to extract the

largest possible amount of felicity from existence; that with many the accumulation of wealth loomed largely. Yet, while this was undoubtedly a material affair, still happiness and wealth were not synonymous. In order to get a living a man must adopt an occupation; for educated persons not only is a living requisite, but also some intellectual gratification, "the successful combination of which two elements is undoubtedly necessary for the attainment of happiness." He then went on, "The well-being of the community in great part depends upon the honor and moral rectitude of our profession, whose powers of doing good and evil are so unlimited." After which he inquired how the public had encouraged and appreciated those upon whose shoulders so much rested, and then went on to show how neither from a political, a social, nor a commercial aspect was medicine exalted, as compared to other callings in life. The doctor gets few honors from the state; his social position is not what it ought to be as one of the learned professions, and compared to the law and the church; and he continued, "There is no item in the expenditure of a household more grudgingly bestowed, more liable to be questioned, or more tardily settled than the doctor's bill." Now, if the editor of the *British Medical Journal* reads his journal, and remembers what he said some years ago, when the writer said something—the truth of which has been generally admitted—about the position of the profession, and compares it with these inaugural utterances, he ought to be a sadder and a wiser man now than he was then; though it is quite possible that such is not the case.

Having eased his mind as to the less fair side of medicine, the lecturer proceeded to paint its attractions. If the state paid it little attention, its freedom was all the greater; its charms were its own. If medicine had no great social status, it at least did not debar its members from high social position. Then he said something very true, and put it very well: "According to the respect with which he treats his own calling, and the courtesy and forbearance he exercises towards his colleagues, so will he raise his profession in the eyes of the world. Just as his relations with the public are dignified and honorable, so will he elevate himself above the adventurer and charlatan." And in this he struck a very weak spot in our professional armor. Then he went on to talk of the pleasure of knowledge, or, rather, that it brings with it. "The acquisition of knowledge of all kinds brings with it its own reward," he quoted. But it is not in student-life that the bulk of men feel this. It is when the hair begins to grow thin on the vertex or to turn gray that this aspect of knowledge dawns upon most of us. With the neophyte it is the examination-table on which he fixes his steady gaze. The lecturer felt this, and expressed himself

so in speaking of medical education : "This should aim at something higher than to prepare the pupil for the ordeal of the examiner or to obtain for him a legal qualification to practise. The real purpose is to initiate the student into the fundamental principles of medicine as a science and an art, to train his mind into habits of accurate observation, to cultivate a love of study, and to develop a taste for scientific pursuits." One wonders whether at this point Dr. Bennett was not indulging in a little sarcasm, as his father often did.

At St. George's Hospital, Dr. Champneys, the Assistant Obstetric Physician, gave the address, which dealt with "Midwifery as a Moral Training." He analyzed the motives which led men to enter the medical profession. Among them are, "first, the hope of being stamped or marked by the profession, and, secondly, the hope of leaving their stamp or mark upon it." He thought it spoke well for medicine that "our ranks are constantly swelling, and swelling with men whose education and social status appear to improve every year, in spite of the fact that its members are comparatively poor." Then he made a quotation : "There are three things which a poor man cannot afford to keep,—pride, a horse, and a conscience. All undoubtedly involve an outlay, or, in other words, a loss of money; but the first and third must be kept at all price, and the second acquired when necessary." He was glad that midwifery now had a recognized position, and that "it is now practically impossible to gain possession of any respectable diploma without the acquisition of a tolerable knowledge of midwifery and the diseases of women." He pointed out that in practice such knowledge, "almost more than any other," stands the practitioner in good stead, especially in the early part of his career; and, though neither have for years come specially under the writer's notice (except so far as disturbances connected with their sex are inseparable from women's troubles, whatever they ail—and that is almost always), he can fully indorse the lecturer's view. Women are grateful for knowledge which applies specially to themselves, and, what is more, their gratitude is rarely a purely negative matter with them. After which he pointed out how association with woman in her hour of need brought out the better and higher qualities of a man, and spoke truth therein. "To be a good practitioner," he remarked, "you must also have 'clean hands' (antiseptically as well as ethically) and a pure heart." He thought that watching nature manage her own affairs was a good broad rule: the more intimately a man knew her ways, the sooner he would be able to detect the first beginnings of mischief. The whole study of pregnancy and parturition he thought most excellent mental and moral training.

At the Middlesex Hospital, Dr. Finlay, Senior Assistant Physician and Lecturer on Forensic Medicine, delivered the address on the subject of "Preventive Medicine." He bewailed the fate of the unlucky Medical Bill, of which his predecessor, the year before, had spoken hopefully. "The daylight which had been let in by it upon some of the license-granting bodies had not been fruitful," he thought. He then dived into the subject proper of his discourse. We had made, he said, steady average progress, in the matter of the percentage of deaths from zymotic disease, since 1875, when the act pertaining to sanitation came into work. Sanitary medicine had made good its claims to public attention. Still, there was much left to be done which had in it promise of great results.

At Queen's College, Birmingham, the address was given by Dr. James Sawyer, Senior Physician to the Queen's Hospital, one of our best provincial physicians. He claimed that theirs was one of the best schools of medicine, not only in the provinces, but "in this or any other country." Some of his passages are well worthy of quotation. "Examination is the dominant 'note' of our current medical instruction. Two or three generations ago the leading principle of medical education was 'imitation.' Now the student sets before him examinations he has to pass; then the apprentice had a master to imitate. Now our teaching is professional, and to a class; then it was more personal, and to an individual. There is much that is good, doubtless, in our present system of medical education; but I am afraid we have scarcely preserved all that was good in the system we have set aside. I dare say we have been gaining in professional knowledge. Have we not been losing something in professional wisdom? We have been growing in scientific precision. Have we not sometimes been loosening, and are we not in danger of losing, some of our best traditions?" There is a right good ring about that utterance! Then he pointed out that they came to college to gain knowledge. Hear what he has to say about knowledge: "Now, I am afraid many of you are apt to imagine—as most people do when they begin preparation for a particular career in practical business or professional life—that all you want now, and that all you need seek, as students, is knowledge. You have heard very often that knowledge is power, and you are prone to think that if you have knowledge all things else will be added unto you. But surely this is not so. Knowledge is not power, but only its material. Knowledge is only power when wisdom points its employment. Even now, and here, when and whither you have come to seek and find knowledge, you must seek and find wisdom too, if you would grow in skill and grace which the life you have chosen requires of you." Wisdom is refined

knowledge, which has a practical value, he continued. "When you have begun to apply knowledge in thought and action," he said, "to the best ends and true purposes of life, you have begun to be wise." He concluded by advising the study of the lives of those who have achieved success, as well as matter for the examination-table: "so you will learn how to prepare for professional life as well as for professional diplomas." And all right-thinking persons, who have the honor of medicine at heart, must agree with Dr. Sawyer, who has evidently "learned wisdom" as well as "acquired knowledge."

J. MILNER FOTHERGILL.

THE KENTUCKY STATE SANITARY COUNCIL.

THE interest in the proceedings of the Kentucky State Sanitary Council, both public and professional, grows with every semi-annual meeting. At Elizabethtown, that beautiful little city in the centre of Hardin County, the session of which I shall speak was opened on the evening of Wednesday, October 1.

As all such meetings go, there was, of course, the usual address of welcome by the orator of the place, which in this instance was delivered by the Hon. T. A. Robertson, Representative of the district in which the Council was held. The usual response to this was made by Mr. George Baber, of Louisville, President of the Council, and in his remarks he took occasion to speak nearly as follows:

"The Kentucky State Sanitary Council is a meeting of the citizens of an appointed place, together with those physicians of the State who, as public-spirited citizens, have an interest in the public health, to discuss ways and means to avoid the outbreak of contagious and infectious diseases, and as far as possible, when once established, to control their spread. It is a part of the object of such meetings also to awaken a keener interest generally upon all matters relating to the general health. As such, every intelligent citizen, regardless of avocation, of politics, of profession or standing, can and should take a deep interest in the subject and in the meeting. This movement, at first ridiculed by the secular press in the State, has come to receive not only the respect, but in some instances the support, of the press, and it has the interest of the best people enlisted everywhere."

At the close of Mr. Baber's remarks, the regular proceedings of the Council were begun. The first subject to engage the attention of the Council was "A Healthy Home," by Dr. Dudley S. Reynolds, of Louisville. He said in substance:

"We have so many things that tend to revert the attention to the old fireside and the

old home that I felt especially honored upon being notified that I was expected to address this audience this evening upon such a popular subject.

"Man's first care in primeval times was to protect himself against extremes of temperature and the vicissitudes of climate, while at the same time he secured the materials for the maintenance of his life. Having secured these, necessity suggested an opening in his rude hut to let in the light and air to dispel the foul emanations of close confinement. Beginning with these simple and elementary ideas, the improvements in his surroundings and habitation were added one by one until the present time, so that now the consideration of the subject of a healthy home naturally divides itself into a discussion not alone of those conditions necessary to sustain life and to preserve health directly, but indirectly as well, by relating to the common dangers of neglect, of unfavorable location, or unsuitable climate, or limited means.

"The consideration of the factors of light and air alone is one of vast importance. They are factors of great importance, and factors too, unfortunately, much neglected in this day of crowded cities. To the air alone and what it contains we must look for the origin of all those diseases which we recognize as distinctly malarial. The consideration of the water-supply is one of equal import, as pertaining more directly to the nourishment of the body, and one of vast importance too, when we recognize it as the medium through which some of the most dangerous and terrible and devastating diseases find entrance to the human organism. We drink the cholera and the typhoid fever." The questions of food, clothing, sleep, and ventilation, together with cleanliness and drainage, called for separate attention, and, in conclusion, the subject of consumption, as due to improper attention to these subjects and as the result of neglect in securing wholesome surroundings, was discussed.

In the discussion which followed Dr. Reynolds's address, Dr. McCormack, of Bowling Green, said that an excellent authority had written that the style and architecture of the school-houses and churches of the people marked their advancement in civilization. He thought it might better be said that the home-life of a people was the true test of their advancement. This is a broad question. Lately the State Board of Health had been engaged in making a sanitary survey of Kentucky, inquiring on a large scale into the home-life and habits of the people. The result is not flattering to our vanity: carelessness in regard to the location, construction, and ventilation of our houses, and in regard to the disposal of house-refuse and kitchen-slops, had been reported from all sides, and the results of these neglects—typhoid and other fevers, diphtheria and other filth-diseases—

are widely prevalent. He pointed out the absence of all systematic attempts at ventilation of dwelling-houses, and also the relation of impure air to scrofula and consumption, as another evidence of home-neglect. This survey showed that only about one-third of the people of this State had been vaccinated. Thousands of dollars were paid from the county treasuries in Kentucky to treat and stamp out smallpox, which properly applied in vaccination would entirely prevent this disease. Cleanliness and carefulness in every home would make Kentucky what it should be,—the healthiest and greatest of the States.

Dr. Breyfogle thought the address of Dr. Reynolds was timely and most excellent, but that it did not go far enough into the subject of a healthy home; that the suggestions contained in the address applied more especially to people of the higher classes, those able to construct and own their own homes; that more attention should be paid to those poorer classes who are under the influence of landlords who care less for the physical than the financial condition of the tenants. We should teach them that these are not the only requirements for a healthy home; teach them that they swallow disease as often in stale vegetables, impure milk, and diseased meats, as from the emanations from garbage and cess-pools; teach them to look into their culinary department oftener; and then if the poor laborer, who goes to his work early, leaving his wife with the cares of a large family, should be unable to fully conform to the modern sanitary regulations in the removal of offal from his premises, they can at least remove some of the predisposing causes of an unhealthy home. Again, some reference should be made, in treating of a healthy home, to the moral influences, which contribute so often to debility, nervous prostration, and insomnia. In this we often find the secret germ which undermines the constitution and prepares the field for reception of the infinitesimal germs so learnedly discussed by my predecessors.

The reading of two papers, one upon the "Injurious Effects of Alcoholic Beverages," and another on "Alcoholic Liquors in their Relations to Health Laws and Regulations," created considerable discussion on Thursday morning.

Dr. Hugh D. Rodman, of New Haven, Kentucky, in the first drew attention to the effects of alcohol, first upon the separate organs of the individual physically, and then morally and mentally upon the man and those dependent upon the soundness and capability of his body for service for the improvement of their surroundings, and in this indirect manner their health. More particularly, however, it was to the effect upon the brain and nervous system of the man that the remarks of Dr. Rodman applied. He showed that a form of insanity, hopeless, irremedi-

able, and perpetual, to which is usually, fortunately, a speedily fatal termination, is one of the common effects of the habitual use of alcohol in one or other of its forms of drink presented to the public; so common, in fact, that, out of one thousand insane patients coming under the observation of Dr. Morel, one of the authorities on the subject, two hundred were deranged through the action of alcoholic liquor. This proportion, in fact, is increasing.

In his report of 1877, Dr. Edgar Sheppard, who has charge of the male patients in the asylum of Colney Hatch, speaks as follows:

"A minute study of the admissions of this year clearly establishes the fact that twenty-eight per cent. of them ought to be ascribed to the excessive use of alcohol."

In the other paper, by Dr. P. C. Sutphin, of Canmer, the subject was treated from a different stand-point, and he raised the question of the necessity of legal enactment to enforce prohibition as a sanitary measure. He declared it useless to insist upon the removal of a closed sewer as a health-precaution, while the saloon and dram-shop, more powerful factors in the destruction of the powers and energies and health and welfare of the supporting elements of the race, were allowed to stand a monument of the cowardice and cupidity of all who claim to have at heart an interest in the health and well-being of Kentucky citizens. Drinkers of alcoholic stimulants, said the reader of the paper, are always the first to succumb to epidemic diseases such as yellow fever and cholera. In Glasgow, Scotland, in 1832, during the epidemic of cholera then prevailing, only nineteen per cent. of the temperate attacked perished, while ninety-one per cent. of the intemperate fell victims to the disease. In the same year at Montreal, of one thousand persons who died there of the disease, only two were teetotalers. Said one writer, "The disease has searched out the haunt of the drunkard, and has seldom left it without bearing off its victim. In New York city, of two hundred and four cases, only six were temperate men, and all of these recovered, while one hundred and twenty-two of the others died." The general drift of this paper might perhaps be well conveyed by the following paragraph:

"It may be said, however, that the Health Board has no power to remove the dram-shop. This may be true so far as the present is concerned, but that this power might be made a matter of the future, if so desired, perhaps admits of but little doubt."

The means by which this could be accomplished was entered upon by the writer of the paper, and afterwards discussed by the members present. The general conclusion of all the remarks and ideas expressed was that three factors might be brought to exercise an influence in this direction, a potent one of which would be by the introduction of the

subject into the common schools, in this way moulding and shaping the sentiments of the generation growing up; another, by enlisting the sympathies of the ministry in the subject, and still further by demanding of legislators those rights which belong to a majority of the people.

Dr. J. N. McCormack, of Bowling Green, read an interesting paper on the "Location and Construction of School-Houses." He was followed by Dr. C. Z. Aud, of Cecilian Junction, on "The Sanitary Science displayed in the Construction of Railroad Depots and Stations."

Dr. W. R. Jones read an interesting recital of a smallpox outbreak in Caldwell County, tracing, from the first case imported, the course of it until thirty-seven cases occurred, with a mortality of three, before it was suppressed by isolation, vaccination, and disinfection.

In the afternoon a paper was read by Dr. R. B. Pusey, of Elizabethtown, on the "Prevention of Cholera;" after which an illustrated lecture was given by Prof. J. A. Tanner, of Louisville, on "Food-Adulterations," which was somewhat surprising as showing the extent to which this practice is carried.

At the evening session a paper by Dr. John D. Bengless, of Brooklyn, New York, on "The Disposal of the Dead," was read by the Secretary.

The writer of this paper carefully traced the different methods adopted from the earliest times to the present, and gave the simplest reasons for their adoption, regarding the question in the beginning as one of convenience, and later as a kind of protection from desecration by wild beasts and hateful foes. Thus rock- and cave-burial was practised in rocky countries, where sepultures were formed by nature's hand. On broad alluvial plains the device most naturally suggesting itself under these conditions was to cover the body with earth directly where it fell. Experience soon teaching the people that a slight covering of earth afforded the dead little protection from the ravages either of driving storms or ravenous beasts or inhuman human enemies, a hole was dug beside the body, into which it was rolled and then covered. Hence the modern forms of the grave and the modern practice of earth-burial. Then he traced the reason for originating tree and scaffold disposition of the dead and of aquatic burial from both convenience and necessity under circumstances under which they are practised, and also explained some of the causes of cannibalism:

"The religious beliefs of various peoples have had much to do with their methods of disposal of the dead. The ancient Egyptians believed that, after three thousand years or more spent in varied states and experiences of transmigration, they would return to re-inhabit the body. Wherefore they preserved

it by a painstaking process of embalming for rehabilitation. They believed also that the viscera were the seat and source of all the debasing appetites and passions, and that in the re-embodied state there would be a complete freedom from every corrupting and defiling influence. Therefore, before embalming, they eviscerated the bodies, that in the after-life they might be free from all debasing appetites.

"The Hindus, on the other hand, also believing with the Egyptians in the doctrine of metempsychosis, had such an utter abhorrence of the thought of returning to the body once inhabited on earth, that they sought most sedulously its utter destruction in order to avoid the possibility of such return. To this end they burned it to ashes and scattered the ashes upon the winds and waves, that it might not be possible for the particles to find each other and to come again together.

"The belief of a portion of the Shinto sect among the Japanese in the literal resurrection of the body and a new birth leads them to bury it in a large womb-shaped urn, the body being posed in the urn precisely as the unborn infant rests in the womb, the knees being drawn up under the arms and the hands folded over the breast. In order further to facilitate and guarantee beyond all peradventure this new birth, the original umbilical cord which at birth attached the child, and which through all the years of life has been preserved for this purpose, is placed in the urn with the body. So it has been held by some that all entombment was originally intended to be a species of enwombment, in order that, thus placed in 'mother earth,' the dead might rest in hope of a new birth and of a future life.

"Who, and when, and where was the bold man who first proposed the burning of his brother's body and executed his proposition, and what the motives prompting that proposition, we are not informed. Two things concerning him would seem self-evident: he must have been a brave man to make the proposition, and he must have had reasons for it which induced others to assent to it and assist in its execution. We may surmise that the practice originated on the battle-field, where conquered soldiery resorted to the burning of the bodies of their fallen comrades to save them from indignity and mutilation by the conquerors. Thus originating as a tribute of affection to the heroic dead of the battle-field, cremation might readily and speedily attain the distinction which we know it afterwards held among the Greeks and Romans, and even among the Hebrews, of a rite of honor bestowed at first only upon distinguished persons, and ever denied to criminals, outcasts, and to unteethed infants and women dying in uncleanness. That in its early history cremation had all the sanitary, aesthetic, and economical advantages which

array themselves in its support in modern times and when conducted according to the most approved modern methods, cannot be claimed. On the contrary, cremation by the open pyre, as usually conducted, by reason of the spice-wood and oils, not to speak of sacrificial offerings burned upon and in the pyre, was costly to a degree. Instead of having about it anything to recommend it to the sensibilities of the refined, it was shockingly barbarous in the seething and torturing action of the flames upon the members of the subject, and, despite the lavish expenditure of spices and perfumes, was inexpressibly offensive in its exhalations. And yet, despite its offensiveness and its expensiveness, cremation became and was for centuries the preferred method of disposal of the dead throughout by far the greater part of the then civilized world. That it should have been superseded by earth-burial is sufficiently accounted for not only by reason of its offensiveness and its great cost, but also by the fact that it rapidly denuded of wood the whole face of lands where it was practised, making fuel so expensive that few could afford a respectable funeral-pile, which became, through the Grecian and Roman empires, almost as costly a luxury as is with us the modern funeral.

"The chief agency, however, in bringing about the change was the spread of Christianity, and this for two reasons: (*a*) the founder of this religion having, upon his death, been entombed, according to the prevailing custom of his people at this time, his followers thought to be like him in following him to the grave, which would not have been so objectionable if they had always been careful to get in 'a new tomb hewn out of a rock,' and then to stay there less than three days, as did he. (*b*) The other consideration was the hostility evinced by Christians to all pagan rites and institutions, cremation among the rest, and their anxiety to do and to be anything and everything that would tend to distinguish them from the pagans among whom they dwelt. Wherefore, as fast as men embraced Christianity they abandoned the pagan practice of cremation. With few exceptions, the people of those times chose neither their religion nor their rulers, insomuch that by royal or imperial decree a hitherto 'pagan' nation became 'Christian' in a day, and the practice of cremation, which once prevailed over almost the entire territory of Europe and Western Asia, from India and Scythia on the east, where it is believed to have had its origin, to the Hyperborean Sea upon the west, and from the Grecian Isles to Scandinavia, was abandoned, except in India, and the practice of inhumation became almost universal. The natives of India, however, have, as a rule, ever retained the practice of cremation, and the influence of their example has travelled eastward into Corea and Japan.

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"If one desires to know the relative merits of the two practices, he cannot do better than to compare the sanitary conditions in this respect of the Chinese and the Japanese, or, in India, the condition of Buddhists and Brahmins, who practised the cremation of the dead, with that of the Mussulman population, who practised earth-burial. China, in the region of its cities, for miles around is a vast, hideous, and pestilential burial-ground, while Japan, in the vicinity of its centres of population, is a land of gardens, wherein grow fruits and flowers and all that in the vegetable kingdom can minister to the comfort and happiness of man. The contrast would be yet more marked if the entire population of Japan practised cremation, instead of only a part of it, and especially were that practice in accordance with approved modern methods, instead of being in great part by the open pyre.

"Much as religious prejudices have had to do with determining the methods of disposal of the dead, there is yet no really essential relation existing between cremation and religion; and as enlightened views obtain, people everywhere are learning more and more that the disposal of their dead is a purely sanitary, economical, and æsthetic question, and that religion has to do only with the life that is and with the immortal part of man in the life to come.

"More and more also are we learning that, whether in the grave or in the crematory fire, and whether in an hour or a hundred years, the body must be dissolved into its constituent elements; that this process of resolution is simply one of oxidation, or burning, as more familiarly known to us. In the grave it is 'cremocaustis,' as the distinguished Liebig designated it: a slow burning amid festering putrescence. In the rosy glow of the crematorium it is rapid burning in cleanliness and light,—but burning in either case.

"While, however, the conditions and the process cannot affect, as to the body itself, the ultimate result, as to the effects upon surviving friends and neighbors of the deceased, and upon the sanitary conditions of the region round about, the differences of effects are just the difference between health and disease,—the difference between life and death.

"In the language of Sir Henry Thompson, 'No dead body can be put into the ground without poisoning the earth, the air, and the water about and above it.' Within a few hours, or days at most, after death, the decomposing body is pervaded with bacteria, or microbial organisms, which, together with all the offensive gases developed in the process of putrefaction, are struggling with each other in foul *mélée*, each seeking to escape from its loathsome imprisonment.

"The body, chemists tell us, is more than three-fourths water, much of which in the

process of decomposition percolates through the earth and finds its way into the neighboring water-courses, carrying with it not only the bacteria engendered in the putrefactive process, but the deadly nitrates and nitrites which give to grave-fed waters their peculiarly enticing brilliancy, while the carbonic acid gas, the carburetted and sulphuretted hydrogen, and other noxious gases, together with numberless microbian organisms, find their way out to the surface to exert their baleful influence upon the relatives and friends of the departed who in tender ministry visit the loved one's grave, and those ministering friends carry with them from the cemetery headaches, sore throats, malaria, typhoidal symptoms, diphtheria, scarlet fever, and numerous other ills, contracted they wonder how, or when, or where.

"Every burial-ground is a magazine wherein we store the seeds of disease to which flesh is heir, to come forth thence we think not how or when, to prey upon us when we are least prepared to resist their attacks. In these thousands of acres, among the fairest and most beautiful of all the land, which in the vicinity of our great centres of population we sequester from the living and give over to the dead, we are thus storing the germs of every form of zymotic contagion, there to await the most favorable conditions for their most perfect development and for their most efficient and most deadly work.

"In all that has been said it is assumed that earth-burial is as complete and satisfactory as possible. But how seldom is this the case! How frequently, especially in times of epidemics, is it superficial and incomplete, thus affording the disease-germs the most favorable opportunity for development, and so converting our cemeteries into very hot-beds of contagion!

"Such is the heritage which we are laying up for posterity. And when our children and our children's children come for stress of space to build their homes in these old burial-grounds or to convert them into parks to be breathing-places and play-grounds for their children, they will wonder how and why these beautiful elevated situations can be so malarial, and why their systems seem to have no tone and stamina for the resistance of disease. The public buildings, including hospitals, and the public squares of many of our cities occupy the sites of the burial-grounds and potters'-fields of generations gone.

"Hannibal encamped in the old Campo Santo outside the city of Syracuse, and took the marble tombs to build a barricade from which to besiege the city, and after a brief siege Hannibal and his army were carried off by the pestilence which resulted from disturbing the old burial-ground. The unseen arrows of disease, sped from the bows of the dead, not the spears of the living Syracusans, slew and scattered the Carthaginian

hosts. So the dead ever avenge themselves upon those who recklessly invade their domain.

"Let us, then, cease to surrender our fairest hill-tops and hill-sides to the dead, for they will convert them into citadels from which to hurl their poisoned arrows into the city of the living, until all shall be together in common burial blent. These fair slopes and summits are needed for the occupancy of the living, and cannot in justice be surrendered to the dead.

"Instead of thrusting our loved ones who have departed this life into the gloomy grave, there to fester in loathsome putrefaction and thence to come forth in all ghastly forms of dreaded disease, let us reverently, decorously, and expeditiously translate them by means of the all-purifying fire into the elements of all new and beauteous life. So shall our fair land become indeed, as it should be, 'the land of the living,' and not 'the valley of the shadow of death.'

Following the reading of this paper, Prof. L. Eddy, of Danville, read one on the subject of "Sanitation a Religious Duty."

In this paper the sanitary regulations of the early nations of which we have an account in the Bible were referred to. The lecturer said that it is plain that thorough sanitation was a religious duty of the Hebrews.

"We believe that the presence of an atmosphere of filth lessens human powers, certainly shortens life, and may at any time suddenly terminate it. We believe the seeds of some diseases float in the air, that the seeds of others are in drinking-water, and that they enter the system by the help of these agents. We believe that these germs, many of them, can be destroyed. We believe that in a perfect state of physical health the seeds of many diseases cannot gain a foothold in the human system, but that filth is a most powerful agent to so weaken the body that disease-germs can readily affect it. We believe that filth, using the term in its broad sanitary sense, is to-day mowing down the human ranks as Minie-balls mow down the ranks of an army in battle. If this is true, a responsibility rests upon us for the existence of filth around us, and where there is responsibility there is corresponding duty. 'Cleanliness is next to godliness,' and our lives should be lives of warfare against sin in the shape of dirt, so that, conquered though we be at the last, yet, when we lie down in a good old age, there will be no cause for us to utter the lament of the woman immortalized in the 'Housekeeper's Tragedy':

"With Grease and with Grime from corner to centre
Forever at war, and forever alert,
No rest for a day, lest the enemy enter,
I spend my whole life in a struggle with dirt.

"Last night in my dreams I was stationed forever
On a bare little isle in the midst of the sea;
My one chance of life was a ceaseless endeavor
To sweep off the waves ere they swept over me.

'Alas! 'twas no dream! Again I behold it!
I yield; I am hopeless my fate to avert!'
She rolled down her sleeves, her apron she folded,
Then lay down and died, and was buried in dirt!'

Following Prof. Eddy, Dr. William Cheatham, of Louisville, read a paper on "Near-sightedness in School-Children, its Dangers and Prevention," after which his remarks were illustrated by illuminated plates in the magic lantern.

After tendering a vote of thanks to the citizens of Elizabethtown by the visiting delegates for the courtesies and hospitalities shown them, the Council adjourned, to meet at Bowling Green in April, 1885.

ALLEN KELCH, M.D.

MEETING OF THE AMERICAN PUBLIC HEALTH ASSOCIATION.

THE Twelfth Annual Session of the American Public Health Association, held at St. Louis, Missouri, October 14 to 17, was one of the most successful ever held. The attendance was as full as usual, but the number of the papers presented was larger than ever before in the history of the organization. I would like to say as much for the quality of the papers, but candor compels the statement that many of them failed to come up to the standard which the Association ought to demand. As usual, a few of the papers were exceptionally valuable, either from their scientific character or their practical importance.

The first paper read gave a review of the reforms demanded by sanitarians in the "Construction of Habitations for the Poor." The author, Dr. C. W. Chancellor, of Baltimore, suggested that an unsanitary house should be declared a public nuisance and dealt with accordingly. Only in this manner could the law reach the difficulty.

Major S. A. Robinson, of Washington, followed with an excellent practical account of how to construct healthy habitations for the poorer classes. He considered in detail the site, water- and drainage-fixtures, light, and ventilation. This was one of the best papers presented during the meeting. The speaker showed by his manner of treating the subject that he had a thorough practical acquaintance with all its details. The same may be said of a paper of great interest to the practical sanitarian, by Dr. W. K. Newton, of Paterson, New Jersey, describing how the sanitary survey of a house should be conducted.

Drs. George H. Rohé, of Baltimore, Walter Wyman, United States Marine Hospital Service, and Adolph Alt, of St. Louis, read papers on the "Hygiene of Occupations." The essay of Dr. Rohé was statistical, and showed, numerically, the influence of certain occupations upon health and the duration of life. Mortality-tables published in 1874 by the Massachusetts Bureau of Registration

were analyzed, and their results compared with those derived from European sources. The trades and occupations dangerous to health were briefly indicated.

The paper of Dr. Wyman concerned itself exclusively with the dangers and hardships of the oystermen engaged in the oyster-fisheries on Chesapeake Bay. The rapacity and brutality of the employers, and the extremely hazardous nature of the occupation, were graphically described.

Dr. Alt referred to the numerous cases of ocular diseases attributable to mechanical injuries in certain occupations, especially stone-cutters. He proposes that employers be made pecuniarily liable for injuries sustained by workmen if these result from neglect of proper precautions which can be enforced by the former.

The President, Dr. A. L. Gihon, Medical Director United States Navy, delivered a very brilliant address at the close of the first day's session. It was an eloquent appeal for more earnest personal interest in practical hygiene.

Among the papers read were several on adulterated and disease-producing foods. Dr. J. Cheston Morris, of Philadelphia, discussed "The Adulteration of Milk and the Milk-Supply of Large Cities." He recited the evils of impure and adulterated milk, and recommended that sealed glass jars should be used for the transportation of milk. In this way the adulteration of the milk in transit between the producer and consumer could be guarded against. A simple method of testing the purity of the milk should be placed in the hands of the consumer, and in this way fraud on the part of the producer could be detected. Dr. B. F. Davenport, of Boston, showed how the inspection of milk had resulted in great improvement in the character of the supply furnished in the latter city.

Hon. Erastus Brooks, of New York, read an essay on "Food and Food-Adulteration," in which the subject was well treated, and many statistics given showing the extreme extent to which many of the common articles of food and medicines are sophisticated.

Prof. V. C. Vaughan, of the University of Michigan, gave an account of an outbreak of cheese-poisoning recently observed in Michigan. Over three hundred cases of poisoning from eating cheese had occurred in that State within the past six months. None of the cases were fatal. The symptoms were those of intense gastro-intestinal irritation. The cheese which produced the morbid effects was excessively acid. A practical method of detecting the acidity was by the use of litmus-paper, which any grocer or householder could apply. Excessive acidity of the cheese should arouse suspicion concerning its quality.

Dr. Charles Smart, United States Army, read a paper on the "Water-Analysis of the Future," in which the present defective methods were criticised. Dr. H. B. Baker, of

Michigan, drew attention to the relation of the depth of the soil-water to the spread of typhoid fever in that State. This paper was illustrated by charts which clearly showed the coincidence of a low ground-water level and increased prevalence of typhoid fever, and *vice versa*.

Dr. Joseph Holt, of New Orleans, described the new system of quarantine which it was proposed to introduce at the outlet of the Mississippi River. The system consists of absolute disinfection of passengers, baggage, cargo, and ship, and only incidental detention. Dr. Holt's plan found much favor with most of the members. There can be no question of its superiority, if properly carried out, over any other system now in use.

Several interesting papers on "School Hygiene" and on "Cremation" were read, and both subjects referred to committees.

Dr. J. F. Hibbard, of Indiana, introduced a resolution to investigate the subject of germicides, disinfectants, and antisepsics in their relations to preventive medicine, to formulate the result of their inquiries, and to submit the same at the meeting of the State Boards of Health, in Washington, on the second Tuesday in December. The committee was constituted for practical work, and consists of Dr. Geo. M. Sternberg, United States Army, chairman; Dr. J. H. Raymond, of Brooklyn; Prof. V. C. Vaughan, of Ann Arbor; Dr. W. H. Watkins, of New Orleans; Dr. Chas. Smart, United States Army; Prof. A. R. Leeds, of New Jersey, and Dr. George H. Rohé, of Baltimore.

Dr. Jas. E. Reeves, of Wheeling, read a report of an elaborate sanitary survey of the Ohio River for the first one hundred miles of its course, and showed the relations of the river to the sewage-disposal and water-supply of the cities and towns along its banks. Dr. E. S. Elder, of Indiana, read an extremely valuable report embodying the results of a sanitary survey of the school-houses in that State. It is very desirable that this sort of work should be continued. Measures of reform can only be intelligently introduced after the actual conditions needing reform are thoroughly understood.

The most important outcome of the meeting was the offer on the part of one of the members of the Association, Mr. Henry S. Lomb, of Rochester, to place two thousand dollars in the hands of a committee, to be distributed in prizes of the value of five hundred dollars each. Mr. Lomb has also headed a subscription-list with fifty dollars to defray the necessary expenses of the committee on disinfectants and antisepsics, above referred to. Mr. Lomb, who is known at his home as a practical philanthropist, is a member of the microscope-manufacturing firm of Bausch & Lomb.

The prizes are to be open to universal competition, and the following subjects are sug-

gested by Mr. Lomb and the committee having the matter in charge:

1. Healthy Homes and Foods for the Working-Classes.

2. Sanitary Conditions and Necessities of School-Houses and School Life.

3. Disinfectants and Individual Prophylaxis against Infectious Diseases.

4. Appliances and Means for Saving Life, and for Protection against Injurious Influences of Occupations upon Health.

The committee to act as judges will consist of one member appointed by the National Board of Health, three appointed by the Executive Committee of the American Public Health Association, and one by the President of the Conference of State Health Boards. All essays must be handed to the committee before the 1st of April, 1885. The conditions of the competition will be announced through the medical journals. It is intended, I believe, that the essays shall be short and practical, in order that the mass of the people to be benefited can be reached and properly influenced. Elaborate theoretical dissertations will stand very little chance of winning a prize.

A notable feature of the meeting was the illustrated lecture by Dr. Geo. M. Sternberg, the distinguished mycologist, on "Disease-Germs." For nearly two hours the lecturer held the attention of a large audience while showing various examples of innocent and pathogenic micro-organisms by means of micro-photographs and the magic lantern.

The officers elected for the ensuing year are:

President.—Dr. Jas. E. Reeves, of West Virginia.

First Vice-President.—Hon. Erastus Brooks, of New York.

Second Vice-President.—Dr. Henry B. Baker, of Michigan.

Treasurer.—Dr. J. Berrien Lindsley, of Tennessee.

Executive Committee.—Drs. H. P. Walcott, of Massachusetts; C. Smart, United States Army; G. B. Thornton, of Tennessee; D. W. Hand, of Minnesota, and H. B. Horbeck, of South Carolina.

Too much praise cannot be awarded to the local committee and the citizens of St. Louis for their active efforts to make the meeting pleasant and successful. All the clubs and places of interest were open to the members of the Association, the city was illuminated in their honor, and carriages were at their disposal for rides through the city and parks. I should fail in my duty did I not mention the names of those largely instrumental in securing these advantages to the Association. They are Dr. J. G. Spiegelhalter, chairman, and Dr. Geo. Homan, secretary of the local committee. It was a matter of considerable comment, however, that the medical profession in St. Louis contributed but a small portion

of the attendance at the sessions. The thought is forced upon one that St. Louis doctors take very little interest in sanitary progress. Another noticeable thing was that representatives from Chicago and Cincinnati were conspicuous by their absence. Can this be accounted for by local jealousies?

The next meeting will be held in Washington, in December, 1885.

Among the distinctively medical movements now in progress in St. Louis is the organization of a Post-Graduate School and Polyclinic. A fine building is in course of erection, and will be ready for occupation in the spring. The members of the new faculty are Drs. W. A. Hardaway, dermatology; H. N. Spencer, otology; W. C. Glasgow, laryngology; C. E. Michel, ophthalmology; J. K. Bauduy, neurology; Geo. J. Engelmann, gynaecology; P. G. Robinson, general medicine; H. Tuholske, surgery, and A. J. Steele, orthopaedic surgery. Most of these are at present connected with the Missouri Medical College, of which the Polyclinic seems to be an outgrowth.

The medical schools here have pretty fair classes, and the teachers in the Missouri and St. Louis Medical Colleges seem fairly to represent the best portion of the profession.

CORSAIR.

ST. LOUIS, October 17, 1884.

PROCEEDINGS OF SOCIETIES.

NEW YORK ACADEMY OF MEDICINE.

A STATED meeting was held October 2, 1884, FORDYCE BARKER, M.D., LL.D., President, in the chair.

Dr. F. H. BOSWORTH read a paper on

THE THREE TONSILS: SOME PRACTICAL SUGGESTIONS AS TO THEIR STRUCTURE, FUNCTION, AND DISEASES.

The author said he had for some time entertained certain views with regard to the three tonsils different from those usually expressed in medical literature. Speaking of the three tonsils he meant the two glandular masses found between the pillars of the fauces and that found in the vault of the pharynx, the latter first recognized and described by William Hunter. The former were called the faecal tonsils, and the latter the pharyngeal tonsil.

The faecal tonsils are not, as generally described, covered by a fibrous sheath, nor are they necessarily almond-shaped, but of whatever shape the morbid process may have given them. The tonsil is not an organ of the body in the sense that the liver or spleen constitutes an organ, and therefore it has no special function to perform in the animal economy. Virtually there are no tonsils: the organs so called do not exist in

the healthy throat, but are the result of a morbid process. All mucous membranes are richly endowed with glands, and perhaps no portion of the mucous tract calls for a greater amount of mucus in the performance of its function than do the upper air-passages, and here we find the glands aggregated in masses. In a condition of health this aggregation of glands does not project prominently from the mucous membrane, nor is their existence easily demonstrated by gross inspection. But the mucous membrane of the upper air-tract is liable to repeated attacks of inflammation, especially in the young, and the tendency of a chronic inflammatory process is to develop hypertrophy in these glands. Dr. Bosworth considered that the only function of the masses of glands in question is to supply mucus or lubricating fluid.

The three tonsils are liable to the same diseased conditions. These might be considered under the heads acute follicular tonsillitis, subacute tonsillitis, croupous and diphtheritic inflammation of the tonsils, and hypertrophy. He did not believe that phlegmonous inflammation ever occurs in the tonsils, and thought that quinsy was rather a disease of the cellular tissue of the fauces than of the tonsils. It involved the areolar tissue, especially of the soft palate, in rare instances of the pharyngeal walls, but not the glands. He believed it to be usually due to the rheumatic habit. Within the past three years one hundred and thirty-three cases had come under his observation, eighty-eight cases being males and forty-five females. The oldest patient was 69 years, and the youngest 9 months of age. Of the entire number of cases the phlegmon occurred in the soft palate in one hundred and fifteen cases; in the pillars in eleven cases; beneath the tonsil in two cases, but in the tonsil proper in no case. A large number of cases of quinsy were aborted by the administration of the salicylates, and when not aborted the medicine seemed to hasten suppuration. He gave a tablespoonful, every two hours, of a solution containing three drachms of the salicylate of soda in six ounces of water. He had also found the bicarbonate of soda useful, as recommended by Dr. Barker, but not equally efficacious with the salicylate. If an abscess formed, it should be treated as an abscess of any other portion of the body,—by incision.

Dr. Bosworth thought that in acute follicular tonsillitis there is a greater amount of constitutional disturbance and fever than could be accounted for by the local affection, and he had been led to regard it as one of the essential fevers, liable to recurrence.

Hypertrophied tonsils give rise to a train of symptoms mainly due to mechanical obstruction of the passages. The enlarged tonsil shows a tendency to subside at the age of puberty. It develops purely from a local

morbid process, and is not the manifestation of a dyscrasia. Hypertrophy of the pharyngeal tonsil had been described by many writers as adenoid tumors or vegetations of the vault of the pharynx. If the hypertrophied tissue offer a mechanical obstruction, it should be removed. Local medication, he believed, had no effect whatever in reducing genuine hypertrophy of the glands. It had been suggested that only a portion of the tonsil be removed; but there was no more reason for this than there was for removing only a portion of a tumor developed elsewhere on the body. The danger from hemorrhage has been exaggerated. In children there is only a slight amount of bleeding; and if in the adult considerable hemorrhage should arise, it could best be checked by the actual cautery. It would be found to come only from the nutrient artery, and on arterial hemorrhage styptics had no effect. Injury to the carotid artery is an unpardonable blunder, and is not to be considered as a danger of the operation.

DISCUSSION.

The PRESIDENT called upon several gentlemen, not specialists in diseases of the throat, to discuss the paper, because of their experience with certain points contained in it. He first said, with regard to his use of the bicarbonate of soda in quinsy, mentioned by the author, that he had been in the habit of seeing a few cases of quinsy each year, and, until some years ago, they almost invariably ended in suppuration. But, since he had begun the local application of bicarbonate of soda, in not a few of the cases the disease was aborted. A marked instance of the kind occurred in a patient seen with Dr. Bosworth, a gentleman of eminence in literature, who was suffering greatly from threatening abscess. The next morning after the use of the remedy he was found at the breakfast-table.

Dr. DOUGLAS would agree with the author on most points, but there were a few with which he must take exception. He would agree with him, for example, that quinsy was a manifestation of rheumatism, or, especially, of gout, and the treatment which he had employed for this affection was largely that used by the President, namely, bicarbonate of soda. At the same time he gave the ordinary remedies against gout. He had found the gargle and spray of bicarbonate of soda also useful in cases of enlarged tonsil; but one of the most beneficial remedies for this class of cases was a powder composed of one part of menthol to a hundred parts of sugar of milk. He would not always resort to the knife for the removal of the enlarged tonsil. It could be slowly but surely reduced in size by the persistent use of a powder composed of salt, camphor, ammonia, and sugar of milk.

Dr. F. H. HAMILTON was inclined to agree with Dr. Bosworth that the enlarged tonsil

should be removed by the knife; yet he had often observed that the enlarged tonsil of childhood disappeared before the twentieth year. He supposed that the author, when he said there was no danger connected with removal of the tonsil, meant to except the acute or engorged state, and cases of the hemorrhagic diathesis. The question had been raised whether all or only a part of the tonsil should be removed: he should say all that the knife would include.

Dr. JACOBI believed that the only efficient treatment for the enlarged tonsil was its removal. Applications would not reduce its size, and where they had apparently done so the reduction was due to some other cause. The enlarged tonsil might remain stationary and appear smaller after the lapse of years because of the growth of the fauces. As to the danger of hemorrhage, there usually was but little loss of blood, but it might be profuse from cutting into the soft palate,—an accident which could not always be avoided. The most efficient means for stopping hemorrhage when it occurred was digital compression, applied perhaps for an hour or more. He could not agree with the author's view that follicular tonsillitis was an essential fever. He looked upon it as a local disease. What Dr. Bosworth took to be an essential fever was probably diphtheria, for cases of diphtheria were often overlooked or mistaken for some other affection. It was a great mistake to suppose that every patient sick with diphtheria must necessarily die. There were many mild cases which went unrecognized, and which were all the more dangerous for that reason, as they were the more likely to spread the disease. Dr. Jacobi laid particular stress upon this point because of its importance to the public health.

Dr. WEBER had not yet seen a case which went to substantiate the view that a phlegmonous inflammation around the tonsils was due to the gouty habit. He had found it most frequently in patients of poor general health.

The PRESIDENT remarked that guaiacum had once been strongly recommended in the treatment of quinsy on account of the supposed gouty origin of the affection, but he had not obtained the results with it which he had been led to anticipate from reading certain articles in the medical journals.

Dr. POST thought the best treatment for the enlarged tonsil was extirpation.

Dr. HAMILTON had found the external application of ice or snow the best means for checking hemorrhage after removal of the tonsil.

Dr. FRUITNIGHT had aborted some cases of quinsy by the administration of the tincture of aconite.

Dr. JARVIS again called attention to a distinction which he had made between the soft and hard or indurated enlarged tonsil, the

latter being found in the syphilitic. If the scirrrous tonsil were cut, it would surely give rise to hemorrhage, and might result fatally. He employed the knife in the removal of the soft enlarged tonsil, and the cautery or snare in the removal of the scirrrous tonsil. He did not think any more of the tonsil should be removed than was necessary, for it doubtless served some physiological purpose, as the lubricating of the fauces and protecting the carotid artery.

Dr. BRANDEIS said he believed in the Darwinian theory of the survival of the fittest: the tonsils had survived some thousand years, fulfilled some physiological purpose, and he doubted not that they performed their function well, whatever it might be. But they, like other structures, were liable to disease, and a diseased tonsil might be worse than no tonsil at all, and therefore he believed it should in proper cases be extirpated. He then pointed out the advantages of the tonsillotomy over the knife in certain cases. Contrary to the experience of Dr. Bosworth, he had found hemorrhage in young subjects rather than in the adult, although not extreme. To prevent hemorrhage, he allowed the patient to sip a solution of tannic acid, and, if necessary, he applied pressure. Dr. Bosworth's description of quinsy corresponded with that in Ziemssen's Cyclopædia, there called peri-tonsillitis, but Dr. Brandeis could not accept the view that it was always an inflammation of the peri-tonsillar sheath. He recommended aconite and the ammoniated tincture of guaiacum in its treatment until an abscess should have formed.

Dr. CORNING had arrested a severe hemorrhage after tonsillotomy in one case by the use of his carotid compressor.

Dr. BOSWORTH, in closing the discussion, said, with regard to the possibility of reducing the size of the tonsils by astringents, that he believed it could not be done. Their size, however, might be reduced in the young, in whom they were in a state of chronic inflammation, by undergoing contracture. This would account for the diminished size of the tonsils on reaching adult life. As to hemorrhage in the young, it was only an oozing; considerable hemorrhage occurred only in the adult. That tonsillotomy was not dangerous was apparent from the fact that in all medical literature not a single fatal case was recorded. The cases in which the carotid artery had been wounded were excepted. This accident could never occur in the hands of a surgeon. In arresting hemorrhage with the actual cautery, the iron should be applied from above downward, that it might not be cooled by the flow of blood before coming in contact with the bleeding vessel. He regarded peritonsillitis as a very good name for quinsy, but he did not believe there was a peri-ton-sillar capsule proper. As to the tonsils performing their function, he did not believe

they existed in the normal state, but that they were the result of disease.

The Academy then adjourned.

NEW YORK PATHOLOGICAL SOCIETY.

A STATED meeting was held October 8, 1884. GEORGE F. SHRADY, M.D., President, in the chair.

CANCER OF THE STOMACH.

Dr. SATTERTHWAITE presented the stomach, pancreas, heart, and kidneys of a man 53 years of age, whom he was called to see in consultation on the 7th of September of the present year. The patient had had a hemiplegic attack, the right upper and lower extremities being slightly involved, but recovering within twenty-four hours. He had lost flesh rapidly during the last month, and gradually during the past two years. His physician had not been able to make out any special disease, the heart, lungs, and urine appearing to be normal; he had suffered some pain in the epigastric region, but no tumor could be felt. During the last month the patient had not been able to retain solid food longer than from twenty-four to forty-eight hours, when it would be vomited up with a good deal of effort. The cachectic appearance developed. About two weeks before death another hemiplegic attack occurred, and, besides losing power over the right extremities, there was also difficulty with speech and swallowing, but this, after a time, almost entirely disappeared. During the last four or five days of life the patient refused to eat, on the ground that his food would not stay down, and he preferred starvation to the pain and vomiting. Death took place from starvation.

At the post-mortem examination a circular patch, of the size of a silver half-dollar, was found at one side of the pyloric end of the stomach, not apparent to the eye, but readily felt with the finger. The pyloric opening admitted only a lead-pencil. This patch undoubtedly acted as a valve at times, and obstructed the exit of food from the stomach. There were some nodules in the pancreas, and parenchymatous nephritis. The specimens from the stomach and pancreas had not yet been examined microscopically, Dr. Satterthwaite preferring to exhibit them in the fresh state, but doubtless the disease was carcinoma.

The PRESIDENT thought that malignant disease should have made greater progress within two years.

Dr. SATTERTHWAITE had seen a case in which the nodule at the pylorus had been recognized two years before death, and symptoms of cancer had existed for a longer time.

Dr. J. C. PETERS thought this specimen might possibly turn out a duplicate of the first

one presented to the Society in 1844. In that case the patient had had somewhat similar symptoms, and at the post-mortem examination it was expected that the thickening which was present in the stomach would be found to be cancerous, but it proved to be simply thickening of the areolar tissue. It was regarded as a rare condition.

Dr. CARPENTER referred to a case in which a cancerous nodule over an inch in diameter, situated three inches from the pylorus, was found at the post-mortem examination, no gastric symptoms having been present during life.

NASO-PHARYNGEAL FIBRO-SARCOMA.

Dr. LINCOLN removed the specimen, July 22, from a boy 16 years of age, who had never been very strong, and who had always suffered from nasal catarrh. He first noticed obstruction to nasal respiration and tumor in 1881. From this date he had suffered from frequent severe nasal hemorrhage, usually coming on after active exercise, but sometimes during sleep. A physician had attempted to remove the tumor, which could then be seen through the nostril and mouth, by the ordinary polypus forceps, but failed. Dr. Lincoln saw the patient first through the courtesy of Dr. Satterthwaite on July 12, at which time there was a noticeable fulness on the right side of the nose; the right nostril was filled to the margin by the growth, which pressed the septum to the left; the soft palate was deflected to the perpendicular, and below it, filling the naso-pharyngeal space, the tumor could be seen, apparently having its principal attachments to the vault of the pharynx and roof of the nostril. It was exceedingly vascular, and evidently growing rapidly, and therefore an immediate operation was advised without preliminary treatment by electrolysis. On July 22 the galvano-cautery wire was applied to the base of the tumor while the patient was under the influence of an anaesthetic, and Dr. Lincoln succeeded in cutting through the pedicle and drawing the tumor out entire through the mouth, no hemorrhage taking place during the operation. The tumor measured in its greatest length four inches, and two and a half inches in thickness. The surface of attachment, which measured two inches by one and three-fourths, was then cauterized. The weight of the growth was two ounces and three-fourths. A week after the operation the cut surface presented a healthy appearance. The patient had not yet consented to a reapplication of the cautery for the purpose of preventing redevelopment of the growth.

The PRESIDENT thought there could be no comparison between this mode of operating and the old mode of preliminary tracheotomy, tamponing the pharynx, and removing the upper jaw. It seemed, however, that there were some cases of naso-pharyngeal tumors

in which the wire could not be applied to the base of the tumor on account of its extensive attachments. He mentioned two cases in which he operated by removal of the upper jaw, the tumor having extensive attachments to the base of the skull, etc. One of the patients died of shock, apparently due to an extension of the growth into the skull, and in the second case the result was similar, although death took place later. He now had a patient who was begging for a similar operation, but he hoped first to have a consultation with Dr. Lincoln as to the advisability of trying the galvano-cautery. The great difficulty in this class of cases was that usually they did not come to the surgeon until it was impossible to apply the wire, and the general health was too greatly reduced from repeated hemorrhages, etc., to make success from a surgical operation at all probable.

Dr. HOWE thought that even in the bad cases referred to, with such extensive attachments, the tumor might be removed piecemeal by the wire.

The PRESIDENT had had one such case, in which a gentleman skilled in this manner of operating had removed a portion of the tumor with the wire, and, while the patient's condition was much improved thereby, the pain consequent on ulceration at the points where the wire had been applied deterred him from submitting to further treatment.

Dr. SATTERTHWAITE thought the operation which Dr. Lincoln had performed, at which he was present, had required a great deal of manual dexterity. A distinguished throat-specialist had said that the tumor could not be removed except by first removing the upper jaw, but Dr. Lincoln performed the operation with the galvano-cautery wire with a single application of the loop. The patient had had no hemorrhages since the operation, and had gained greatly in flesh and strength. He had been impressed very favorably with the operation, and would be glad to hear Dr. Lincoln's further experience with it.

Dr. LINCOLN said he had had six cases, two of which were still undergoing treatment. Of the other four cases he believed there was no possibility of recurrence. He had had no fatal result. With regard to the difficulties overcome during the operation, he referred to a case operated upon in 1876. The patient had been operated upon by Dr. Willard Parker, and also by Dr. Lutkins, who referred him to Dr. Lincoln. At the time when he saw him, the boy, five and a half feet high, weighed only sixty-eight pounds. His condition was such that death seemed inevitable; several surgeons had said that no interference by treatment was justifiable. The tumor had so developed as to cause protrusion of the right eye, projected through the nostril to the margin of the upper lip, and in the mouth to such an extent that the tongue had to be depressed at night by the spatula to enable the patient

to sleep. There had been frequent hemorrhages. Dr. Lincoln began preliminary treatment by electrolysis, making about twenty-five applications. The growth of the tumor was thus checked, hemorrhage ceased, and the patient recuperated so that the final operation could be undertaken with perfect safety. The wire was applied, the tumor was removed entire without any hemorrhage; some applications of the cautery were made subsequently, and there had not been any signs of return of the growth since. The other cases were similar, but not quite so pronounced.

FIBRO-CYST OF THE UTERUS.

Dr. PRUDDEN presented a specimen which had been sent him by Dr. C. C. Stockard, of Columbus, Mississippi, and the history of which had been published in the *Medical Record*, August 16, 1884. It was interesting principally on account of its large size. Together with the fluid contents, which had been drawn off six days before death, it weighed one hundred and thirty-five pounds. Eight gallons and seven pints of fluid had been withdrawn by tapping. The microscopical examination showed the specimen to be a fibroma of the uterus. It had developed in a negress who had borne children.

FATAL INTESTINAL OBSTRUCTION.

Dr. C. W. KNIGHT presented a part of the intestine and uterus, which had been removed from the body of a negress, 35 years of age, unmarried, who had been the subject of constipation for a good many years, with frequent attacks of colic, but she never consulted a physician. Frequently her bowels did not move once in two weeks. After her last attack had existed two weeks, she began to take purgative medicines, and the third week sent for a physician, who found no constitutional disturbance. She was up and about her room until the last day of life, when she began to vomit copiously, had enormous distention of the abdomen, and died suddenly. At the autopsy the small intestine was found to be distended and congested, and about five inches from the cæcum there was a constriction between two fibrous bands, which had produced a furrowed appearance in the gut, but had not caused ulceration. The obstruction was immediately relieved on cutting the constricting bands. There were also fibroids in the uterus.

THE NEW ENGLAND JOURNAL OF DENTISTRY has become united with and merged into the *Dental Association Journal*, which will hereafter be published as the *Archives of Dentistry*. Preparations are making on an extensive scale for editorial collaboration from all parts of the country, and no effort will be spared to make the *Archives* a national and representative dental journal.

REVIEWS AND BOOK NOTICES.

DIPHTHERIA, CROUP, ETC.; OR, THE MEMBRANOUS DISEASES, THEIR NATURE, HISTORY, CAUSES, AND TREATMENT; WITH A REVIEW OF THE PREVAILING THEORIES AND PRACTICE OF THE MEDICAL PROFESSION; ALSO, A DELINEATION OF THE NEW CHLORAL-HYDRATE METHOD OF TREATING THE SAME, ITS SUPERIOR SUCCESS, AND ITS TITLE TO BE CONSIDERED A SPECIFIC. By C. B. GALENTIN, M.D. Small 8vo, pp. 174. New York, J. H. Vail & Co., 1884.

We give the title of this little book in full, in order to be understood when we say that the same literary fault mars the book that mars the title.

The author has produced a work which is too large for a tract and too small for a treatise and combines many of the faults of both with few of the virtues of either. It has a vice of comprehensiveness. Having something to say, he has forgotten that brevity is the soul of wit, and so obscured it with tediousness, the limbs and outward flourishes of wit, that the thing to be said seems scarcely said at all.

This is much to be regretted, because the gist of the matter, namely, the treatment of diphtheria by the chloral hydrate both constitutionally and locally, is of great importance, and would have attracted wide attention if the author had presented his views and the results of his experience in a compact, practical article in one of the journals.

We believe that this mode of treatment—which, by the way, is not so exclusively his own as the author appears to think—is an excellent one, and we agree with him in his views as to the questionable value of iron and potassium chlorate. We regret that the good he seeks to do is likely to be restricted by the form he has selected for the publication of his opinions.

J. C. W.

SHAKESPEARE AS A PHYSICIAN. By J. PORTMAN CHESNEY, M.D. J. H. Chambers & Co., Chicago, St. Louis, Atlanta, 1884. Cloth, 8vo, pp. 226.

"O, the recorders!—let me see one."—*Hamlet*.

The aim of the author of this work is to record—grouped under the headings of Obstetrics, Psychology, Neurology, Pharmacologia, Etiology, Dermatology, Organology, Chirurgery, and Miscellaneous—every word which in any way relates to medicine found in the complete works of Shakespeare (which text is not stated); and, if he had done no more than this, the work would have had both interest and value. The digressions, irrelevant quotations, and almanac anecdotes which pad the book are out of place, and should have been omitted. Considerable labor has been spent upon the compilation,

but it is marred by this evident effort at book-making. Sixteen wood-cuts more or less adorn the pages of the work, one-half of which have absolutely nothing whatever to do with Shakespeare, but illustrate topics entirely foreign to the text. Their irrelevancy and value may be judged by some of their titles : An Illustration of the Benefits of Protracted Lactation ; Enquiry on Lunacy (Medical Experts to the Right) ; The Doctor looks for the Skeleton behind Him ; The Effects of Gathering May-Apple Root ; The Woodman and his Arrangement for Cheap Boarding ; The famous "Dr. Sunrise" condescends to visit the Good People of St. Joseph. If this book was intended to advance the literary reputation of the author, it might be appropriately introduced by a quotation from "Love's Labor's Lost."

F. W.

DRUGS AND MEDICINES OF NORTH AMERICA. A Quarterly devoted to the Historical and Scientific Discussion of the Botany, Pharmacy, Chemistry, and Therapeutics of the Medicinal Plants of North America, their Constituents, Products, and Sophistications. J. N. Lloyd & C. G. Lloyd, Cincinnati, 1884.

This handsomely-printed quarterly, devoted to a special department of *materia medica*, contains many valuable illustrations, and is a welcome addition to the literature of our indigenous flora. The high price of such works usually debars many from possessing them ; but this publication, at one dollar per year, is free from this objection, and will find many appreciative and interested readers. The contents of the three numbers which have so far appeared show careful preparation, and are highly creditable.

THE MEDICAL RECORD VISITING-LIST FOR 1885, published by William Wood & Co., is out, and can be obtained, with or without dates, for thirty or sixty patients per week. It is handsomely bound in morocco, and is a durable and useful visiting-list.

GLEANINGS FROM EXCHANGES.

OPERATIVE OPENING OF PULMONARY CAVITIES.—Dr. E. Bull (Christiania), in a paper on this subject, read at the International Medical Congress, Copenhagen, laid down the following propositions : 1. Abscesses of the lung which can be diagnosed with certainty, and are so situated that they can be opened through the chest-wall, should be treated in the same way as pleural empyema, 2. The condition is the same with regard to limited gangrene of the lung. If several gangrenous foci exist, each one must be treated separately. 3. Echinococci, and, 4, foreign bodies in the lung are to be treated in a similar manner. 5. In bronchiectasis the formation of a pulmonary fistula is indicated only

when the accumulation of stagnant matter in large cavities essentially contributes to the deterioration of the patient's condition. 6. In rare cases of tuberculosis, where a large cavity is the predominating condition, the cavity may be laid open with the view of improving the condition of the patient. 7. The operative puncture of a pulmonary fistula is justifiable as a palliative measure. 8. In cases where diagnosis cannot be arrived at, exploratory puncture is certainly of much value ; positive as well as negative results may be derived from it. 9. Adhesion of the layers of the pleura ought not to be insisted on as an absolutely necessary preliminary to the opening of pulmonary cavities. 10. Amyloid degeneration is not an absolute contra-indication to a palliative operation. 11. The use of the thermo-cautery is to be recommended both for the opening of cavities and for the destruction of diseased portions of lung-tissue.—*British Medical Journal*.

COMEDONES.—At the last meeting of the American Dermatological Society, Dr. A. Van Harlingen recommended for the treatment of comedones a paste composed of glycerin, three parts ; vinegar, two parts ; and kaolin, four parts. This, which had been first suggested by Unna, he regarded as having decided value.

THE ENGLISH COMMISSION sent to investigate the cause of the cholera in India are now busily prosecuting the work at Bombay. It is announced that Dr. Klein has swallowed some of the comma-bacilli without evil results.

MISCELLANY.

SEVERE PUNISHMENT OF A DRUGGIST.—The case of a druggist in the upper part of the city, who has recently been found guilty of involuntary manslaughter by a jury because of a mistake which caused the death of a child, calls for a word of comment. Mr. Heintzelmann, the unfortunate druggist referred to, has been engaged in his business in this city for over twenty years, and has in that time earned an enviable reputation for devotion to his work, and for skill, attention, and carefulness, among physicians as well as the community at large. The mistake, it appears, was made in his store, though, he claims, not by him personally. He adopts the check-system for prescriptions, which indicates his great caution : this was not proof, however, against an ignorant woman picking up the wrong medicine, which happened to be a liniment instead of a baby-syrup. Although the bottle was decorated with skull and crossbones and plainly marked "poison" and "for external use," this woman, who declares that she cannot read, administered some to her baby, who died of lead- and laudanum-poisoning, for which the coroner held the

apothecary responsible. Although the medicine was very different from what the description given by the doctor had led her to expect that it would be, and despite its bad taste and smell, three teaspoonful doses were deliberately given by the mother of the child, at intervals of two hours, and not until then was the physician sent for, who detected the mistake; but the child was already moribund. It would really seem as if the druggist had taken every reasonable precaution, first by requiring a check, and secondly by placing the word "poison" and the symbol on the bottle, and that his responsibility should not be increased in order to accommodate exceptional ignorance. Contributory negligence was clearly present upon the part of the attendants of the child, who should have examined the medicine as soon as received, and returned it for explanation. It certainly does not seem right that exemplary punishment should be visited upon the druggist-defendant in this case; and we hope that his application for a new trial will be granted, in order that the case may be more fully considered, and that the responsibility may be more justly apportioned.

A CURIOUS case in regard to the removal of the dead came up recently in the Surrogate's Court, at Brooklyn, New York, under the following circumstances:

Gardiner H. Wolcott died at Astoria in November, 1881, and was buried in Greenwood Cemetery, at Brooklyn. He was supposed to be intestate, and his property, amounting to about forty thousand dollars, was divided up among the next of kin. Not long since a will was found in which was the following provision: "It is my special command that my remains lie beside those of my darling Nina's in Greendale Cemetery. Any expense in carrying out this wish will be paid from my estate."

Greendale Cemetery is situated at Meadville, Pa., and the Nina mentioned was an actress named Nina Varian. He was supposed to be unmarried, but there was some evidence that she was in reality his wife. The question then came up, Shall the testator's wish as to a burial-place be carried out? The estate was divided up, and the executor had no means of defraying the expenses.

Under these circumstances he applied to the Surrogate's Court for an order requiring the persons who had received the estate to pay the expense of removal according to their respective shares. The relatives opposed the application, and the Surrogate denied it.

It was clear that if the will had been found at the time of death, or before the distribution, the removal might have been carried out by the executor; but the Surrogate now says, "The direction of a court should not be sought to authorize the executors to incur an additional expense when the immediate parties interested in the estate will have to be called

upon to bear their proportionate expenses while they at the same time are strongly protesting against the removal of the remains."

A REMARKABLE FAMILY QUARREL.—A novel point in the law of the home came up recently in Ohio, where a father asked a court to grant him an injunction against his two sons living at home, and upon his showing the case was a strong one. The sons were 33 and 26 years of age respectively, unmarried, strong, and able to earn their own living. The father said they had never paid anything for their board, and that when requested to leave the house they had refused. They had also been so violent about the house, and had used such profane language, as to make their mother sick, and both of them afraid of their lives. The furniture had also been broken by them during some of their freaks. The judge granted a temporary injunction, and the case is to come up for a further hearing.

THE first issue of the *Medical Chronicle*, of Manchester, England, edited by Jas. Niven, M.A., M.B., and W. J. Sinclair, and published under the direction of an able committee, has been received. It is a monthly of large octavo size, 120 pages, printed on white paper, with clear type, and presents a very attractive appearance. The contents of the initial number include five original communications, besides a chronicle of nearly a hundred pages of progress in the several departments of medicine. The journal is ably edited, and will be received with favor by the profession.

THE DONATION of half a million dollars to the College of Physicians and Surgeons of New York by Wm. H. Vanderbilt is one that commands admiration for the feelings which prompted the gift and the wisdom shown in the choice of an object for the donor's munificence. It is understood that a plot of ground two hundred by three hundred and fifty feet, between Fifty-ninth and Sixtieth Streets, opposite Roosevelt Hospital, has been chosen. There is ample room for future development of the college, and for the erection of laboratories and other buildings as needed.

THE *Therapeutic Gazette*, published by Mr. Geo. S. Davis, of Detroit, will hereafter be edited by Prof. H. C. Wood and R. Meade Smith. It is announced that the editorial office will be in this city. The *Gazette* has already achieved marked success in its field, and under its present management its usefulness to both pharmacology and therapeutics will be undoubtedly advanced, and the journal kept at a high standard.

THE EPIDEMIC OF CHOLERA IN ITALY has brought out, in an unexpected way, a curious relation existing between the medical profession and the public. Sanitary officers engaged in their duties in some of the small villages have been mobbed, while physicians

found patients who refused their aid and looked upon their ministrations with marked and open mistrust.

IN the daily press we observe that Judge Tourgee is credited with the statement that the pathway to success is so plain in the professions of law, medicine, and theology that it almost requires the possession of genius in order to fail in any of them. He maintains an eloquent silence with regard to the profession of journalism: does he mean to imply that the same rule holds good, or is it reversed?

ENCYCLOPÆDIA OF MEDICAL WIT, HUMOR, AND CURIOSITIES OF MEDICINE.—Julius Wise, M.D., proposes to publish a large volume with the above title, and respectfully solicits the kindly aid of the profession in collecting material suitable for the work. His address is 806 Olive Street, St. Louis, Missouri.

THE reception given by the Pathological Society to Dr. Delafield, of New York, on the 22d of October, was a success. Among the invited guests were Profs. Mallett and Osler.

IN Kent sixty-nine persons were poisoned by, and one died from, eating shrimps which had been taken from near the mouth of a sewer.—*British Medical Journal*, October 11.

NOTES AND QUERIES.

OBITUARY.

PROFESSOR LOUIS ALEXANDER DUGAS, M.D., of Augusta, Georgia, died October 19, in the seventy-ninth year of his age. Born in Washington, Georgia, in 1806, he studied medicine with Dr. Dent, of Augusta, and was graduated in 1827 from the University of Maryland. After several years' study in Europe, he returned to his native State, and was one of the founders of the Medical College of Georgia, in which he held the chair of Surgery during the remainder of his life. The University of Georgia conferred the degree of Doctor of Laws upon him in 1869. He was one of the Vice-Presidents of the International Medical Congress held in Philadelphia in 1876, and was repeatedly elected President of his State Medical Society. He was editor of the *Southern Medical and Surgical Journal* for a number of years.

OFFICIAL LIST

OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U.S. ARMY FROM OCTOBER 12, 1884, TO OCTOBER 25, 1884.

NORRIS, BASIL, LIEUTENANT-COLONEL AND SURGEON.—Relieved from duty as attending-surgeon, Washington, D.C., and ordered for duty as Medical Director Division of the Pacific and Department of California, relieving Surgeon E. I. Bailey. Col. Bailey, on being relieved, will assume the duties of attending-surgeon at San Francisco, California.

SPENSER, WILLIAM C., MAJOR AND SURGEON.—From Department of Dakota to Department of the East.

GODDARD, CHARLES E., MAJOR AND SURGEON.—To be relieved from duty at Jefferson Barracks, Missouri, and to report for duty in Department of Dakota.

MCCLELLAN, ELY, MAJOR AND SURGEON.—From Department of the East to duty at Cavalry Depot, Jefferson Barracks, Missouri. S. O. 242, A. G. O., October 15, 1884.

MCKEE, JAMES C., MAJOR AND SURGEON.—Granted leave of absence for one month, with permission to apply at division headquarters for one month's extension. Paragraph 1, S. O. 149, Department of Colorado, October 3, 1884.

ALDEN, CHARLES H., MAJOR AND SURGEON.—Relieved from duty at Fort Yates, Dakota Territory, and ordered for duty at Fort Snelling, Minnesota. S. O. 125, Department of Dakota, October 20, 1884.

WOLVERTON, W. D., MAJOR AND SURGEON.—Granted one month's leave of absence, to take effect when his services can be spared by his post commander. Paragraph 4, S. O. 211, Department of the East, October 16, 1884.

VICKERY, R. S., MAJOR AND SURGEON.—During temporary absence of Major J. C. McKee, Surgeon, U.S.A., Medical Director of the Department, in addition to his other duties, will assume charge of the office of the Medical Director. G. O. 34, Headquarters Department of Colorado, October 8, 1884.

WINNE, C. K., CAPTAIN AND ASSISTANT-SURGEON.—In addition to his duties as post surgeon at Benicia Barracks, will also attend the sick at Benicia Arsenal, California. S. O. 122, Headquarters Department of California, October 13, 1884.

HAVARD, VALERY, CAPTAIN AND ASSISTANT-SURGEON.—Assigned to temporary duty at Fort Schuyler, New York Harbor, New York. Paragraph 2, S. O. 211, Department of the East, October 16, 1884.

PORTER, J. Y., CAPTAIN AND ASSISTANT-SURGEON.—Granted leave of absence for one month, on surgeon's certificate of disability, with permission to leave the limits of the Department. Paragraph 3, S. O. 138, Headquarters Department of Texas, October 9, 1884. Confidential telegraphic order of same date.

STRONG, NORTON, FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Assigned to duty at Fort Union, New Mexico. S. O. 198, Department of Missouri, October 4, 1884.

PHILLIPS, JOHN L., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Transferred from Department of the East to Department of Dakota. S. O. 245, A. G. O., October 18, 1884.

LIST OF CHANGES OF STATIONS OF NAVAL MEDICAL OFFICERS FROM OCTOBER 12, 1884, TO OCTOBER 25, 1884.

Surgeon GEORGE R. BRUSH, to temporary duty at the Naval Laboratory, October 11, 1884.

Medical Inspector CHARLES H. BURBANK, detached from the "Brooklyn," and placed on waiting orders, October 15, 1884.

Surgeon JOHN H. CLARK, detached from the "Lackawanna," and detailed as fleet-surgeon of the Pacific station, October 17, 1884.

Surgeon GEORGE H. COOKE, to the "Lackawanna," October 17, 1884.

P. A. Surgeon JOHN M. EDGAR, to the Receiving-Ship "Franklin," October 11, 1884.

Medical Inspector A. HUDSON, detached from the "Lancaster," and placed on waiting orders, October 14, 1884.

Surgeon JOSEPH HUGG, placed on waiting orders, October 13, 1884.

P. A. Surgeon P. A. LOVERING, detached from the "Lackawanna," and placed on waiting orders, October 17, 1884.

P. A. Surgeon E. H. MARSTELLER, detached from the "Monongahela" and ordered to the "Lackawanna," October 17, 1884.

Assistant Surgeon WILLIAM MARTIN, detached from the "Passaic," and placed on waiting orders, October 14, 1884.

P. A. Surgeon H. M. MARTIN, detached from the "Brooklyn," and placed on waiting orders.

DELAVAL BLOODGOOD, promoted to the grade of Medical Director, August 22, 1884.

AARON S. OBERLY, promoted to the grade of Medical Inspector, March 28, 1884.

HENRY M. WELLS, promoted to the grade of Medical Inspector, August 22, 1884.